

Office of the Chief Medical Examiner Annual Report 2021



Commonwealth of Virginia
Virginia Department of Health
Office of the Chief Medical Examiner
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Office of the Chief Medical Examiner

Annual Report 2021

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INTRODUCTION

Executive Summary

The Virginia Department of Health, Office of the Chief Medical Examiner (OCME) is proud to present the 2021 Annual Report. In addition to fulfilling accreditation requirements for the Virginia OCME by the National Association of Medical Examiners (NAME), the OCME Annual Report provides specific information about deaths occurring in the Commonwealth of Virginia during the 2021 calendar year and investigated by the OCME. This information is a valuable resource for Virginia's citizens and leaders to identify trends in preventable deaths, which can be used to protect the lives of all Virginians through education and changes in public policy.

As a model statewide death investigation system with four district offices, the OCME fulfills a core function mandated by Code of Virginia, § 32.1-283. By Code, the OCME is tasked with investigating the deaths of individuals who died in Virginia from trauma or violence, when sudden and unexpected, while unattended by a physician, under suspicious circumstances or in the custody of law enforcement or other state or local authority. When deaths are reported to one of the four district OCME offices, the case information is entered into the Virginia Medical Examiner Database (VMEDS) and the case is managed through this statewide data system allowing for consistent, reliable data that can be reviewed and interpreted for the annual report.

The COVID-19 pandemic began in Virginia in March 2020 and came with countless impacts to the healthcare industry, which include those working in the fatality management field, like the OCME. Similar to the rest of the United States and the world, Virginia experienced---and continues to experience at the time of this publication---a substantial increase in deaths over the expected number of deaths based on pre-pandemic numbers. The difference in numbers between expected deaths (pre pandemic) forecasted through 2020 as if the pandemic never happened, from actual certified deaths experienced through 2020, are known as excess deaths. A large portion of these excess deaths since the pandemic began can be explained by COVID-19 fatalities (which by Code of Virginia, do not fall under OCME jurisdiction); however, a separate portion of the excess deaths were seen among OCME cases and were not due to COVID-19 infections, but instead, things like increases in fatal drug overdoses, homicides, and other causes.

The impacts of the COVID-19 on fatality statistics continue to be seen well into 2023 and may last well until the pandemic is declared over and the virus is considered endemic. It should be expected that rate calculations using population estimates and mortality statistics from the pandemic period will be affected.

Some of the important trends in 2021 among OCME cases include:

- Among manners of death, all categories but suicide increased in 2021 compared to 2020
- Accidental Deaths
 - Accidental deaths have been increasing in Virginia since 2011. In 2021, the number of accidental deaths increased 14.7% compared to 2020 (with rates of 59.8 and 52.2 per 100,000 persons, respectively)
 - Of all deaths investigated by the OCME in 2021, 53.5% (n=5,141) were accidents
 - Males, both Black and White, had the highest rates of accidents, all causes (106.8 and 86.5 per 100,000, respectively)
 - Over 49% (n=2,533) of all accidental deaths were due to fatal drug overdoses
- Homicides
 - The number of homicides in 2021 increased 11.3% from the previous year
 - The number of gun-related homicides in 2021 increased 11.2% compared to 2020 (508 and 457 deaths, respectively)
 - Black males and males aged 20-24 years had the highest homicide rate in 2021 (43.3 and 27.5 per 100,000, respectively). Black males were victims of homicide at a rate 11.5 times that of White males, 10.0 times that of Hispanic males, and 6.9 times that of Black females
 - Richmond City had both the largest number of homicides by locality of residence and locality of injury (n=69 and n=106, respectively). Petersburg had both the highest homicide rate by locality of residence and by location of injury (46.0 and 65.7 per 100,000, respectively)
- Suicides
 - In 2021, Whites committed suicide at a rate 4.8 times that of Hispanics, 3.8 times that of Asians, and 2.2 times that of Black populations
- Fatal motor vehicle collisions
 - Black males and males 85+ years had the highest rate of fatal motor vehicle collisions (25.7 and 37.4 per 100,000, respectively)
- Fatal drug overdoses

- The number of drug/poisoning deaths continue to climb with an increase of 15.6% in 2021 compared to 2020 and an increase of 41.8% in 2020 compared to 2019 (rates of 31.1, 26.9, and 19.1 per 100,000 persons, respectively)
- For the third year in a row, Black males had the highest rate of fatal drug overdoses, all substances, followed by White males (66.3 and 44.7 per 100,000, respectively)
- Fatal fentanyl and/or heroin overdoses surpassed prescription opioid (excluding fentanyl) overdoses in 2015 and this trend continued at a greater magnitude in 2021
- Nearly 98% of all fatal opioid overdoses in 2021 were accidents
- In 2021, fentanyl (prescription, illicit, and analogs) was responsible for 77.1% of all fatal overdoses, all substances. These deaths often involve other drugs in addition to fentanyl.
- Gun-related deaths
 - The majority (57.1%) of gun-related deaths were due to suicide in 2021, similar to previous years

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Virginia Department of Health

Commonwealth of Virginia

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Introduction

This report represents the deaths investigated by the Virginia Department of Health, Office of the Chief Medical Examiner in 2021.

Data Collection and Preparation

The data in this report reflect deaths accepted by the Office of the Chief Medical Examiner (OCME) pursuant to §32.1-283 of the Code of Virginia for the 2021 calendar year. These deaths are both Virginia residents and non-residents whose deaths generally occurred within the borders of the Commonwealth of Virginia. The Virginia OCME classifies these deaths by its own coding schema, which differs from mortality data published by other OCME surveillance groups, law enforcement agencies, the Virginia Center for Health Statistics, and the Centers for Disease Control and Prevention (CDC). Any discrepancies between data presented by the OCME and other nosology groups are the result of data collection and analytic variations among these groups.

Statistical Summary

- Data is based upon both Virginia residents and non-Virginia residents, whose deaths have come under the jurisdiction of the Virginia Office of the Chief Medical Examiner
- Rates
 - Rates are per 100,000 persons of the specific Virginia population being described
 - Crude rates are used for all deaths occurring in Virginia, regardless of residential status
 - Rates calculated from small case counts (<5) are considered unreliable and should be interpreted with caution
 - **Please note: at the time of analysis and publication of this 2021 annual report, the National Center for Health Statistics (NCHS) discontinued the bridged population estimates for all states in the US indicating 2020 was the last year the methodology was used and will be discontinued from 2021 forward. These population estimates are used as denominator values for rate calculations throughout the report. Currently, NCHS, CDC, and VDH are in discussions about appropriate population estimates for 2021, but have not come to a resolution at the time of this publication; therefore, 2020 population estimates are used for denominator values throughout the entirety of this report.**

- Race/Ethnicity (based on information provided from next of kin on decedent's death certificate)
 - Asian, Black, Native American, and White races represent those who have been identified as non-Hispanic ethnicity
 - 'Hispanic' are persons identified as White race with Hispanic ethnicity
 - 'Other' race are persons that are identified as more than one race or Black, Asian, or Native American race with Hispanic ethnicity
- Toxicology
 - Results are based on blood specimens and vitreous fluid

OVERVIEW – OFFICE OF THE CHIEF MEDICAL EXAMINER

The General Assembly of Virginia abolished the Office of Coroner's Physician in 1946 and appointed a Chief Medical Examiner. Four years later, the Office of the Chief Medical Examiner (OCME) became an office within the Virginia Department of Health. The OCME is comprised of four district offices, each accredited by the National Association of Medical Examiners, to serve the citizens of the Commonwealth.

Jurisdictional Authority

Pursuant to § 32.1-283 of the Code of Virginia, all of the following deaths are investigated by the OCME:

- Any death from trauma, injury, violence, or poisoning attributable to accident, suicide or homicide
- Sudden deaths of persons in apparent good health and deaths unattended by a physician
- Deaths of persons in jail, prison, or other correctional institutions, as well as deaths in police custody. This includes deaths during legal intervention such as a death following a police pursuit
- Deaths of patients/residents of state mental health facilities
- Sudden death of any infant less than eighteen months of age whose death might be attributable to Sudden Infant Death Syndrome
- Any other suspicious, unusual, or unnatural death

The OCME receives death reports in each of the four offices, takes custody of deaths that fall under OCME jurisdiction as outlined by the Code of Virginia, and conducts medicolegal death investigations into those fatalities. In Virginia, this is performed by a statewide medical examiner system comprised of a chief medical examiner, several assistant chief medical examiners, and medicolegal death investigators in four district offices, as well as local medical examiners in communities across the state. Medicolegal death investigators receive initial notification of death and determine, under the supervision and review of assistant chief medical examiners, if the death is under the jurisdiction of the OCME. After determining that a death is under OCME jurisdiction, medicolegal death investigators and/or local medical examiners may attend the death scene to document and review circumstances surrounding death. In 2021, approximately 127 local medical examiners worked with the OCME to examine decedents, collect toxicology samples, and sign certificates of death. Using professionally established guidelines, and under the direction of assistance chief medical examiners certain

cases were determined to require a medicolegal autopsy, which includes both an internal and external examination.

When an autopsy is required, it is conducted at one of four district offices: Central, Northern, Tidewater, or Western. Each OCME district is staffed by assistant chief medical examiners who are board certified forensic pathologists (American Board of Pathology), board certified medicolegal death investigators (American Board of Medicolegal Death Investigators), administrative, and morgue personnel. The Chief Medical Examiner is responsible for the overall operations of Virginia's medical examiner system.

The Virginia OCME is a model medical examiner system with two separate mission elements that form the core of OCME staff members' efforts.

Medicolegal Mission

- Conduct medicolegal death investigations
- Perform examinations to certify cause and manner of death and recover evidence
- Testify in court proceedings
- Educate peers and professionals on subjects related to death investigation

Public Health Mission

- Reduce violent death by conducting surveillance and fatality reviews
- Provide support and technical assistance to local fatality review teams
- Identify index cases and pathogens in disease outbreaks in the interest of public health
- Cooperate with organ procurement organizations to save and enhance lives through organ and tissue donation and transplantation
- Administer the Virginia State Anatomical Program to provide cadavers for medical education

Virginia's local medical examiners and assistant chief medical examiners are committed to public safety and public health. To promote public safety, they testify to their findings in criminal and civil courts throughout the Commonwealth. They advance public health through their investigations of deaths that present a hazard to Virginia's citizens, such as emerging infections and bioterrorism.

Virginia Demographics in 2020

In 2020, the estimated population of the Commonwealth was 8,590,563 persons. The average age of Virginia residents was 37.8 years and females represented 50.8% of the population. Whites constituted 62.1% of the population, Blacks 20.0%, Hispanics 10.0%, Asians 7.6%, and Native Americans 0.3% of Virginia's people.

Division of Death Prevention, Fatality Review and Surveillance Programs

In addition to conducting medicolegal death investigations to identify the cause and manner of death, the OCME oversees several public health surveillance projects and fatality review team initiatives. Surveillance projects include the Virginia Violent Death Reporting System (VVDRS), the Overdose Data to Action (OD2A) grant, the Sudden Death in the Young Case Registry (SDY), Enhancing Reviews and Surveillance to Eliminate Maternal Mortality (ERASE MM), and the Pregnancy-Associated Mortality Surveillance System (PAMSS). Fatality review is performed on child and maternal deaths at the state level and at the local and regional level on adult, child, overdose, and domestic violence related deaths.

Surveillance projects and fatality review teams examine various types of preventable deaths to provide a better understanding of factors contributing to the death so that legislators, policy makers, and other stakeholders can make informed decisions for injury and violence prevention. Fatality review and surveillance is retrospective examination, with most programs being approximately 1-3 years behind the current year. The data collection and review process requires a "deep dive" into a decedent's medical, mental, social, educational, and criminal background, which takes time, as records must be requested, collected, collated, reviewed, and summarized.

Virginia Violent Death Reporting System (VVDRS) was implemented in 2003 as part of the National Violent Death Reporting System (NVDRS). Virginia was among the first six states and the first statewide medical examiner system to be funded for this project, which is now operating in all 50 states and two territories.

The VVDRS collects information about deaths of Virginians who die in Virginia due to violence (suicide, homicide, legal intervention, unintentional firearm discharge, deaths of an undetermined manner, and deaths due to terrorism) and correlates victim information with the circumstances surrounding the death. Data from several

sources, among them forensic pathology, forensic science, law enforcement, vital records, and health statistics, are linked to provide a comprehensive picture of violent death in the Commonwealth of Virginia.

The Overdose Data to Action (OD2A) grant was implemented in 2019 as part of a collaborative effort between multiple offices throughout the Virginia Department of Health, including The Office of Family Health Services, Office of Emergency Preparedness, Office of the Chief Medical Examiner, Office of Epidemiology, and the Office of Emergency Medical Services. The multi-arm project strives to collect and understand fatal and non-fatal accidental overdose events and then use that data to inform policy and programs to prevent such events. Data is collected using the aforementioned NVDRS and other surveillance systems. The Department of Forensic Science also receives funding as part of this award to implement quantification programs to quantify opioid derivatives for use in toxicology testing and monitoring.

The OCME's arm, the State Unintentional Drug Overdose Reporting System (SUDORS), goal is to prevent accidental death through the collection of surveillance data to create public health strategies to address opioid addiction. SUDORS captures information on accidental and undetermined overdose deaths in Virginia. While much of this data is also collected through the VVDRS, the SUDORS collects additional information such as descriptions of paraphernalia found at the scene, prescription monitoring reports, naloxone administration, and any history of substance abuse, treatment, or relapse.

Domestic Violence Fatality Review was established in 1999 when the General Assembly enacted §32.1-283.3 of the Code of Virginia. This statute provides for the establishment of local and regional domestic violence fatality review teams and directs the OCME to provide technical assistance and support to these teams.

Domestic violence fatality review has gained prominence and momentum in the last decade, both here in Virginia and across the United States. The purpose of domestic violence fatality review is to prevent future deaths by carefully examining the events that led to a fatality; by analyzing system responses to those deaths; and by improving a community's coordinated response to domestic violence. Multidisciplinary teams are formed at the local or regional level. Membership in these teams varies among localities, but generally includes representatives from law enforcement, Commonwealth Attorneys, social services, courts, probation and parole, domestic violence programs, mental health, and healthcare.

State Child Fatality Review Team was established in 1995 by the Virginia General Assembly and the Governor of Virginia. Working in the spirit of public health, the multidisciplinary team conducts retrospective reviews of the circumstances surrounding violent and unexpected child death and develops consensus recommendations for intervention and prevention of future child deaths. The team reviews child deaths in a topical manner. By reviewing cases based on a specific type of death, the team is able to determine risk and protective factors associated with that type of injury and to develop targeted recommendations for intervention and prevention. Team members include representatives from pediatrics, emergency medicine, child psychiatry, law enforcement, mental health, social services, forensic pathology, Commonwealth Attorneys, local fire and emergency medical services providers, injury prevention groups, child advocacy organizations, and other state agencies.

Over the years, the team has identified common trends observed in child deaths, including the presence of family violence and economic instability as risk factors for homicide of young children, the importance of adult supervision in preventing unintentional injury death, the need for policy and education to prevent child drownings, and the prevalence of family substance abuse and mental health problems in cases of sleep-related infant deaths and deaths due to poisoning. Through its many reviews, the Virginia State Child Fatality Review Team has discerned that child death in Virginia is patterned and largely preventable.

Infant and Child Mortality Surveillance was created 2015. The team implemented the Infant and Child Mortality Surveillance System, for those aged 0-17 years in an effort to guide and better inform discussions, planning and legislative action that effects the health and well-being of children and families in the Commonwealth. This project seeks to provide reports detailing the circumstances and characteristics of both infant and child deaths occurring in Virginia.

Child fatality review is supported by the Virginia Department of Health, Office of Family Health Services with Title V funds from the U.S. Department of Health and Human Services, Maternal and Child Health Bureau.

Regional Child Fatality Review Teams were established in all five Virginia Department of Social Services (DSS) regions in the Commonwealth. These teams review all child deaths investigated by a local department of social services for suspicions of abuse or neglect, regardless of the finding. The OCME provides training and

technical assistance to these teams, assisting them with the theory and practice of effective child fatality review, developing guidance documents, and providing trainings for team members, coordinators and recorders. The OCME also assists these regional teams with the process of developing recommendations for intervention and prevention of child deaths as well as helping to improve data collection, entry, and quality assurance strategies.

Virginia's Pregnancy-Associated Mortality Surveillance System (PAMSS) and Maternal Mortality Review Team (MMRT) are housed in the OCME. Surveillance of all deaths of women occurring during pregnancy or within one year of pregnancy (termed "pregnancy-associated death") is conducted to provide up-to-date information on patterns and trends. Data from PAMSS includes not only surveillance data, but also data collected from the MMRT process. Current PAMSS data indicates pregnancy-associated maternal death in Virginia remains a significant public health problem. The ERASE MM support agencies and organization that coordinate and manage Maternal Mortality Review Teams to identify, review, and characterize pregnancy related deaths and identify prevention opportunities.

Rising maternal mortality rates throughout the United States have led to renewed interest in expanding state-based review teams. Virginia's Maternal Mortality Review Team is one of the longest continuously functioning multidisciplinary review teams in the US. The team was established in March 2002 as a partnership between the Office of Family Health Services and the OCME. The team was codified during the 2019 General Assembly session via House Bill 2546 effective July 1, 2019 with the OCME continuing to provide coordination for the team. The Maternal Mortality Review Team reviews all cases of pregnancy-associated death, regardless of the cause or manner of death or outcome of the pregnancy. Systematic, retrospective review of these deaths is performed to understanding the circumstances surrounding the death so that recommendations and interventions can be made to prevent future deaths.

The team is multidisciplinary and includes representatives from: Medical Society of Virginia; Virginia Section of the American College of Obstetricians and Gynecologists; Virginia College of Emergency Physicians; Virginia Chapter of the American College of Nurse Midwives; Association of Women's Health, Obstetrics and Neonatal Nurses; Virginia Chapter of the National Association of Social Workers; Virginia Hospital and Healthcare Association; Virginia Sexual and Domestic Violence Action Alliance; Virginia Dietetic Association; local health departments; and state planning agencies. Maternal mortality review is supported by the Virginia Department

of Health, Office of Family Health Services with Title V funds from the U.S. Department of Health and Human Services, Maternal and Child Health Bureau.

Virginia's Sudden Death in the Young (SDY) Project began in January 2015 in four communities served by the Tidewater OCME: the cities of Hampton, Newport News, Norfolk, and Virginia Beach. In 2018, three additional cities and three counties were added to the project. Those additions include the cities of Chesapeake, Suffolk, and Portsmouth and the counties of Accomack, Northampton, and York. In 2023, the program expanded to include the Western Tidewater Region and Poquoson as trial sites to explore further expansion of the project in the next funding cycle. Using techniques from surveillance and fatality review, this project involves intensive data collection and multidisciplinary review of all deaths involving infants, children and youth up to 19 years of age for which the cause of death was undetermined or not fully understood. Understanding the precise etiology of these deaths and defining who is at-risk is a necessary first step to designing interventions and preventions to reduce these deaths. Virginia is one of 10 states participating in this national project.

The SDY project involves an intensive death investigation of each case. This requires the collection and review of extensive records for the child and family including past medical histories, social service histories, school records for the child where applicable, criminal histories and other relevant records for the case. The information gathered from the death investigation is used by both a multidisciplinary child fatality review team and a clinical review team. The project utilizes the VDSS Eastern Region review team, which is comprised of direct service providers in the areas of social services, law enforcement, education and child advocacy. Their role is to assess family protective and risk factors for each death, to evaluate the quality of agency response, and to identify prevention strategies. The clinical review team is made up of a pediatric neurologist, geneticist, maternal fetal medicine specialist, pediatrician, cardiologist, a social worker, OB/GYN, and a forensic pathologist. Their role is to identify undiagnosed medical risk factors that may have contributed to the child's death. The critical purpose of these investigations and reviews is to determine if causes of death can be further clarified, refined, and described, and then ultimately lead to the prevention of these premature deaths.

An optional component of the project allows consenting families to participate in a study of these deaths through an SDY Case Registry, which is being conducted by the CDC, the National Heart, Lung, and Blood Institute (NHLBI), and the National Institute of Neurological Disorders and Stroke (NINDS) at the National Institutes of

Health. Consent includes the storage of bio-specimens for DNA banking and testing in the event that medical insights or breakthroughs in the future promise additional information about the child's death.

Adult Fatality Review was established for Virginia localities effective July 1, 2015. Currently, there are two local and regional teams (Richmond Metro and Northern Virginia) established in the Commonwealth. Similar to child and domestic violence death review efforts, local communities may now convene such teams to examine deaths of any persons 60 years of age or older or any vulnerable or incapacitated adult 18 years of age or older, under three different scenarios: (1) persons who were the subject of an adult protective services or law enforcement investigation; (2) adults whose death was due to abuse, neglect, or exploitation or acts suggesting abuse, neglect, or exploitation; and (3) persons whose death was investigated by the Office of the Chief Medical Examiner as suspicious, unusual, or unnatural. The goal of this process is to identify at risk populations in their communities, opportunities for improved response to adult abuse and neglect, and best practices for preventing further abuse and violence. Currently there is no funding for a State Adult Fatality Review Team and efforts to solicit grant funds have not been successful or funds have not been available for this work. At this time, the Adult Fatality Review remains an unfunded mandate.

Local and Regional Overdose Fatality Review was established for Virginia localities effective July 1, 2018. Currently, there are no formal teams, but interest is growing. Similar to child, adult, and domestic violence death review efforts, local communities may now convene such teams to examine deaths of any persons who died of an overdose related death. Localities may establish a team under this statute (Code of Virginia §32.1-283.7) for the purpose of: (1) conducting contemporaneous reviews of local overdose deaths, (2) promoting cooperation and coordination among agencies involved in investigations of overdose deaths or in providing services to surviving family members, (3) developing an understanding of the causes and incidence of overdose deaths in the locality, (4) developing plans for and recommending changes within the agencies represented on the local team to prevent overdose deaths, and (5) advising the Department and other relevant state agencies on changes to law, policy, or practice to prevent overdose deaths. The goal of this process is to identify at risk populations in their communities, opportunities for improved response to overdoses, and best practices for preventing further overdose related deaths.

In Virginia, information learned from fatality review efforts supports the development of recommendations and information sharing with critical stakeholders to reduce injury and death. The Division of Death Prevention is dedicated to providing data and technical assistance to those in our community. Data can be requested from any of our projects, by reaching out to Division Director or the Project Manager for the particular program of interest. More information and who to contact can be found at: <https://www.vdh.virginia.gov/medical-examiner/division-of-death-prevention/>

Training and Education

Forensic Pathology Training Programs

Website — <http://www.vdh.virginia.gov/medical-examiner/forensic-pathology-training-programs/>

The Virginia Commonwealth University School of Medicine (VCU), in conjunction with the OCME, offers an Accreditation Council for Graduate Medical Education (ACGME) accredited fellowship in the subspecialty of forensic pathology. The forensic pathologists of the Central, Tidewater, and Western District offices are the core faculty of the Department of Legal Medicine at VCU, chaired by the Chief Medical Examiner. OCME office staff has full access to facilities at VCU and its medical, dental, pharmacy, hospital administration, nursing, and other health science schools. The Department of Legal Medicine Faculty also participate as attending physicians for the forensic pathology fellowship.

The forensic pathology training program is designed to provide training and experience to pathologists pursuing a career in forensics. It is the aim of the forensic pathology training program that, by the end of the fellowship year, the trainee can adequately manage medicolegal death investigations with self-assurance and technical competence. After the 12-month fellowship, the physician should have obtained enough experience to be eligible to take the American Board of Pathology examination in the subspecialty of Forensic Pathology. Upon completion, the trainee will be ready to accept a position in all types of Medical Examiner/Coroner systems. All district OCME offices are approved to host and train physicians for the fellowship. The fellowship continues to interview candidates for 2024-25.

The OCME offers forensic rotations to residents, medical students, and pathology assistant students. Medical students from VCU and the Eastern Virginia Medical School (EVMS) typically rotate for a 2–4 week elective to learn autopsy techniques and death certification. Pathology assistant students from EVMS rotate for 8 weeks to learn autopsy techniques and procedures at the Tidewater and Central Offices. The OCME also offers month long rotations for resident physicians from VCU, University of Virginia, Walter Reed Hospital, and National Institute of Health who desire exposure to forensic pathology as part of their anatomical pathology training. Residents from other in state or out of state programs may be accepted for training.

National Association of Medical Examiners Accreditation

The National Association of Medical Examiners (NAME) is the professional organization for physician medical examiners, medicolegal death investigators and death investigation system administrators who investigate deaths of public interest, either legal or public health, in the United States. NAME has developed an accreditation process to improve the quality of death investigation within medical examiner offices and systems. When an office is accredited by NAME, it is an endorsement that the office has provided an environment adequate for a medical examiner to practice his or her profession and that the office can adequately serve its jurisdiction. The accreditation process includes but is not limited to: inspection of facilities, review of facility and personnel safety, qualification of medical examiners, review of medicolegal procedures, and review of reports and records. One requirement within the reports and records section is an annual statistical report, which the Virginia OCME fulfills with this report. The following two tables provide data on the NAME required fields on 2021 death investigations:

	Central	Northern	Tidewater	Western	Total
TOTAL DEATHS STATEWIDE					
Total Deaths Reported to OCME	6647	3938	3417	5644	19646
OCME Cases by Examination Type					
Complete examinations (autopsy)	1026	622	739	696	3083
External examination	1956	1223	1433	1646	6258
Partial examination	5	72	78	109	264
TOTAL CASES ACCEPTED BY THE OCME	2987	1917	2250	2451	9605
OCME Cases by Manner of Death					
Accident	1713	1000	1089	1339	5141
Homicide	206	71	226	108	611
Natural	685	510	585	642	2422
Suicide	316	293	275	317	1201
Undetermined	59	41	72	44	216
Undefined for Fetal Death*	8	2	3	1	14
TOTAL CASES ACCEPTED BY THE OCME	2987	1917	2250	2451	9605

* Fetal deaths are omitted from manner of death classifications. This is because fetal deaths are not given a certification of live birth in Virginia and thus, do not receive a death certificate. In 2021, the OCME accepted fourteen fetal deaths under OCME jurisdiction of the 3,462 total fetal deaths reported to Vital Records

	Central	Northern	Tidewater	Western	Total
Bodies transported by office	2987	1917	2250	2451	9605
Bodies transported to office	1945	1130	1141	1328	5544
Cases with toxicology (including retro cases)	1990	1322	1606	1170	6088
Exhumations	0	0	1	0	1
Eye donations on OCME cases	5	1	117	9	132
Hospital autopsies under OCME jurisdiction	0	0	0	0	0
Organ and tissue donations on OCME cases	37	79	21	13	150
Retrospective cases (cases handled separately)	18	37	24	31	110
Scene visits	294	307	383	91	1075
Unclaimed bodies	212	103	38	45	398
Unidentified bodies after examination (long term)	1	0	0	0	1

SECTION 1: TOTAL OCME CASES (N=9,605)

In 2021, 19,646 deaths were reported to the Office of the Chief Medical Examiner (OCME), which accounted for 23.1% of the estimated total deaths that occurred in Virginia. The OCME accepted 9,605 or 48.9% of these investigated deaths as either autopsies or external examinations (views). [NOTE: Retrospective cases are not included in the accepted total case count, but are examined separately in Section 9. While these deaths were investigated in 2021, they may not necessarily have occurred in 2021]. The caseload for 2021 represented a 10.6% increase compared to 2020. Of the deaths investigated by the OCME in 2021:

- Among manners of death, all categories but suicide increased in 2021 compared to 2020
- Black males continue to have disproportionate number of homicides compared to their portion within the general population
- White males continue to have the highest rate of suicide in the Commonwealth
- Males continue to represent a larger portion of OCME deaths than females (70.0% in 2021)
- The 55-64 year old age group had the greatest number of OCME deaths, representing 17.3% of OCME cases
- Fairfax County had the largest number of both residential deaths (n=543) and deaths by injury locality (n=603). Charlotte County had the highest rate of death by residential locality (304.6 per 100,000) and Greenville County the highest rate of death by injury locality (363.5 per 100,000)

Figure 1.1 Number and Rate of OCME Cases by Year of Death, 1999-2021

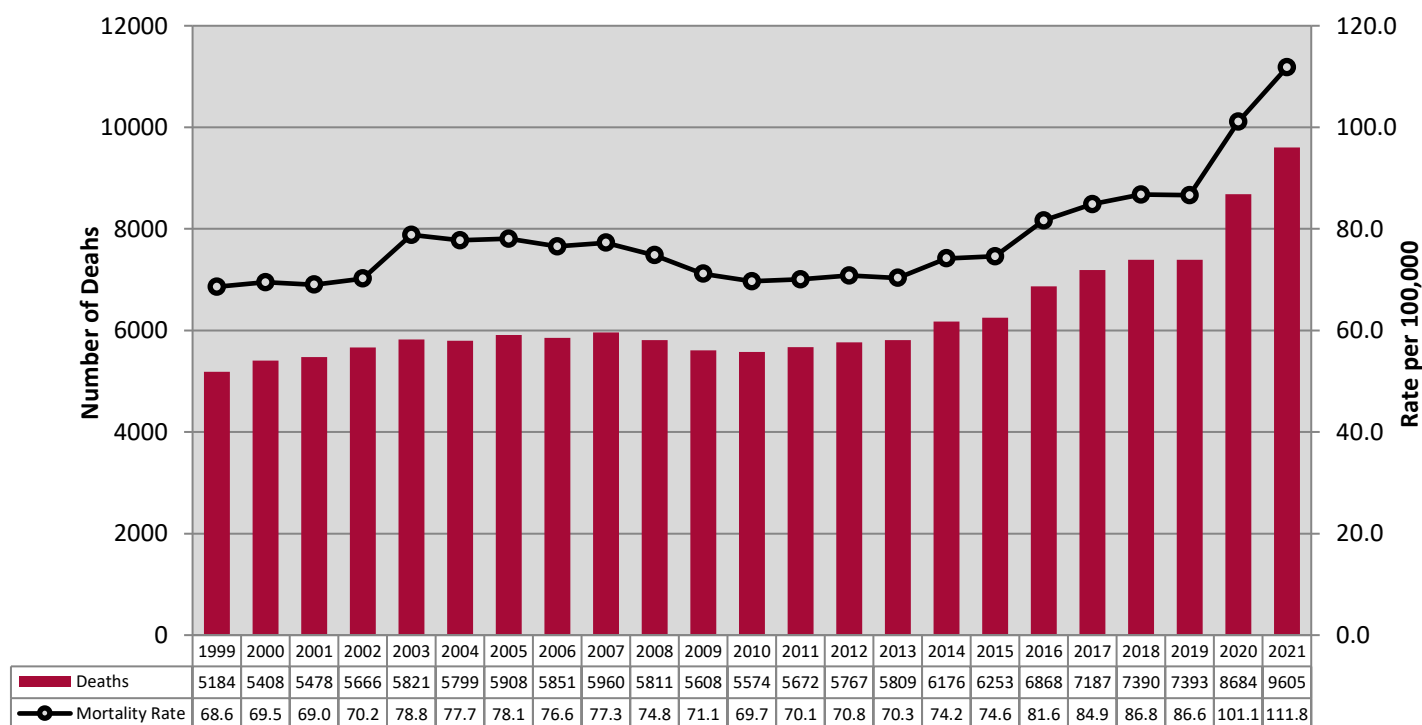
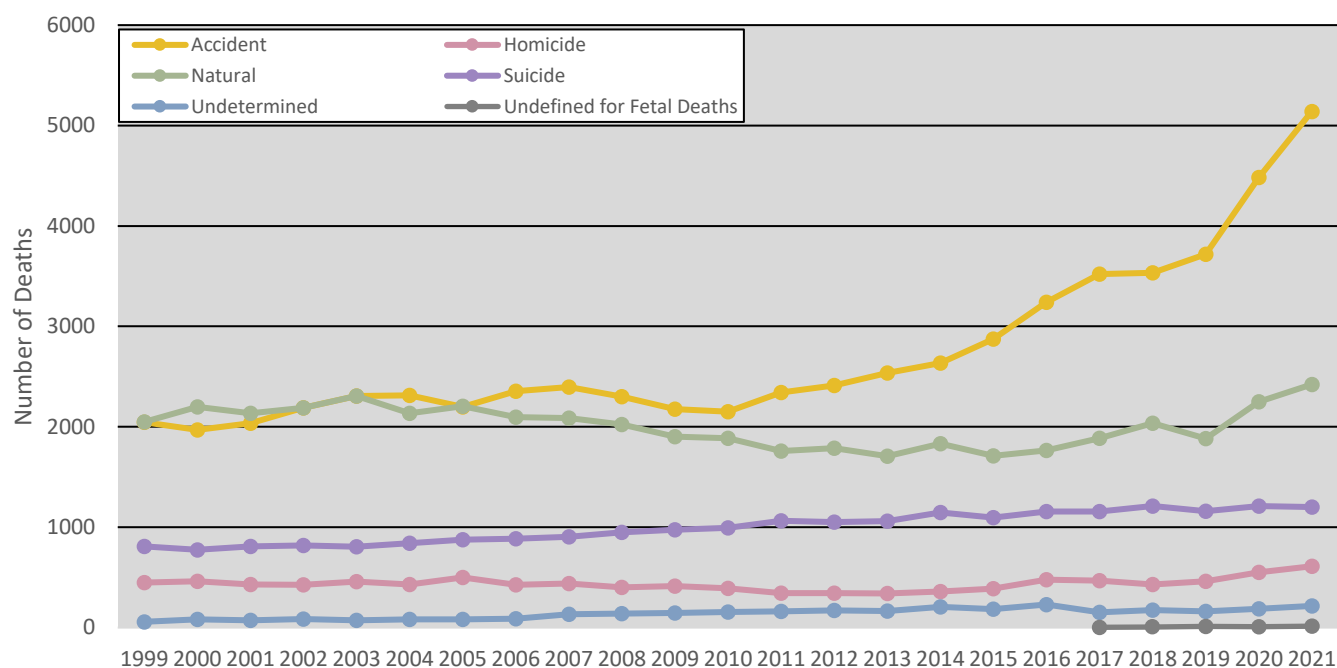
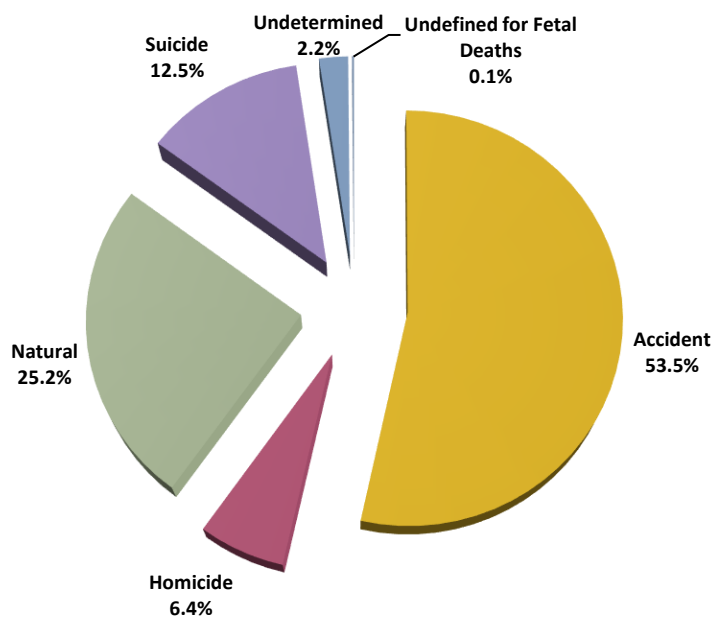


Figure 1.2 Number of OCME Cases by Manner of Death, 1999-2021

* Fetal deaths are omitted from manner of death classifications. This is because fetal deaths are not given a certification of live birth in Virginia and thus, do not receive a death certificate. In 2021, the OCME accepted fourteen fetal deaths under OCME jurisdiction of the 3,462 total fetal deaths reported to Vital Records

Figure 1.3 Percentage of OCME Cases by Manner of Death, 2021

* Fetal deaths are omitted from manner of death classifications. This is because fetal deaths are not given a certification of live birth in Virginia and thus, do not receive a death certificate. In 2021, the OCME accepted fourteen fetal deaths under OCME jurisdiction of the 3,462 total fetal deaths reported to Vital Records

Table 1.1 Number of OCME Cases by District and Manner of Death, 2021

OCME District					
Manner	Central	Northern	Tidewater	Western	Total
Accident	1713	1000	1089	1339	5141
Homicide	206	71	226	108	611
Natural	685	510	585	642	2422
Suicide	316	293	275	317	1201
Undetermined	59	41	72	44	216
Undefined for Fetal Deaths	8	2	3	1	14
TOTAL	2987	1917	2250	2451	9605

* Fetal deaths are omitted from manner of death classifications. This is because fetal deaths are not given a certification of live birth in Virginia and thus, do not receive a death certificate. In 2021, the OCME accepted fourteen fetal deaths under OCME jurisdiction of the 3,462 total fetal deaths reported to Vital Records

Table 1.2 Number of OCME Cases by Autopsy Status and District, 2021

Autopsy Performed			
OCME District	Yes	No	Total
Central	1031	1956	2987
Northern	694	1223	1917
Tidewater	817	1433	2250
Western	805	1646	2451
TOTAL	3347	6258	9605

Table 1.3 Number of OCME Cases by Manner of Death and Autopsy Status, 2021

Autopsy Performed				
OCME District	Yes	No	% Yes	Total
Accident	1205	3936	23.4%	5141
Homicide	609	2	99.7%	611
Natural	500	1922	20.6%	2422
Suicide	811	390	67.5%	1201
Undetermined	212	4	98.1%	216
Undefined for Fetal Deaths	10	4	71.4%	14
TOTAL	3347	6258	34.8%	9605

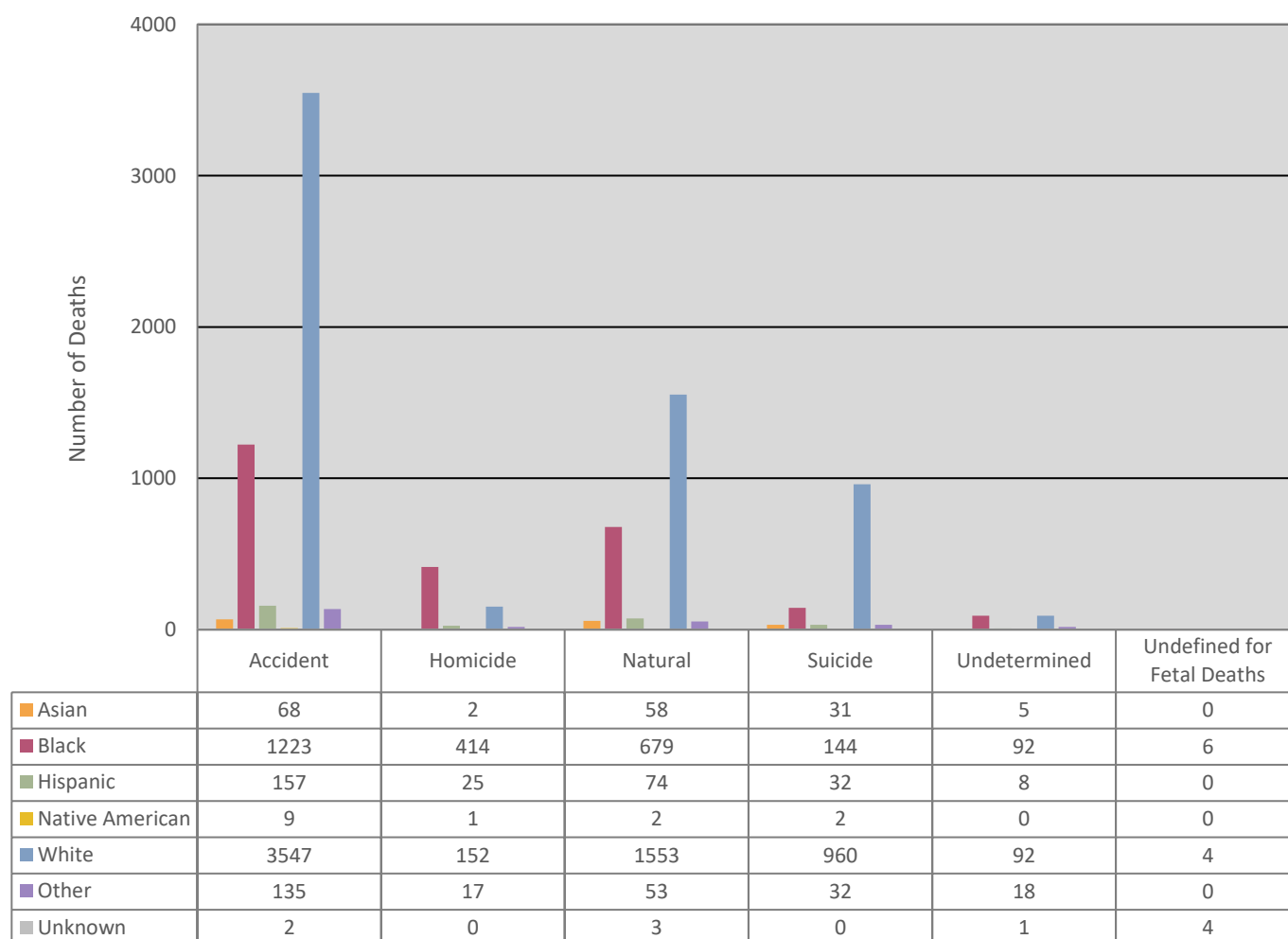
* Fetal deaths are omitted from manner of death classifications. This is because fetal deaths are not given a certification of live birth in Virginia and thus, do not receive a death certificate. In 2021, the OCME accepted fourteen fetal deaths under OCME jurisdiction of the 3,462 total fetal deaths reported to Vital Records

Table 1.4 Number of OCME Cases by Age Group and Autopsy Status, 2021

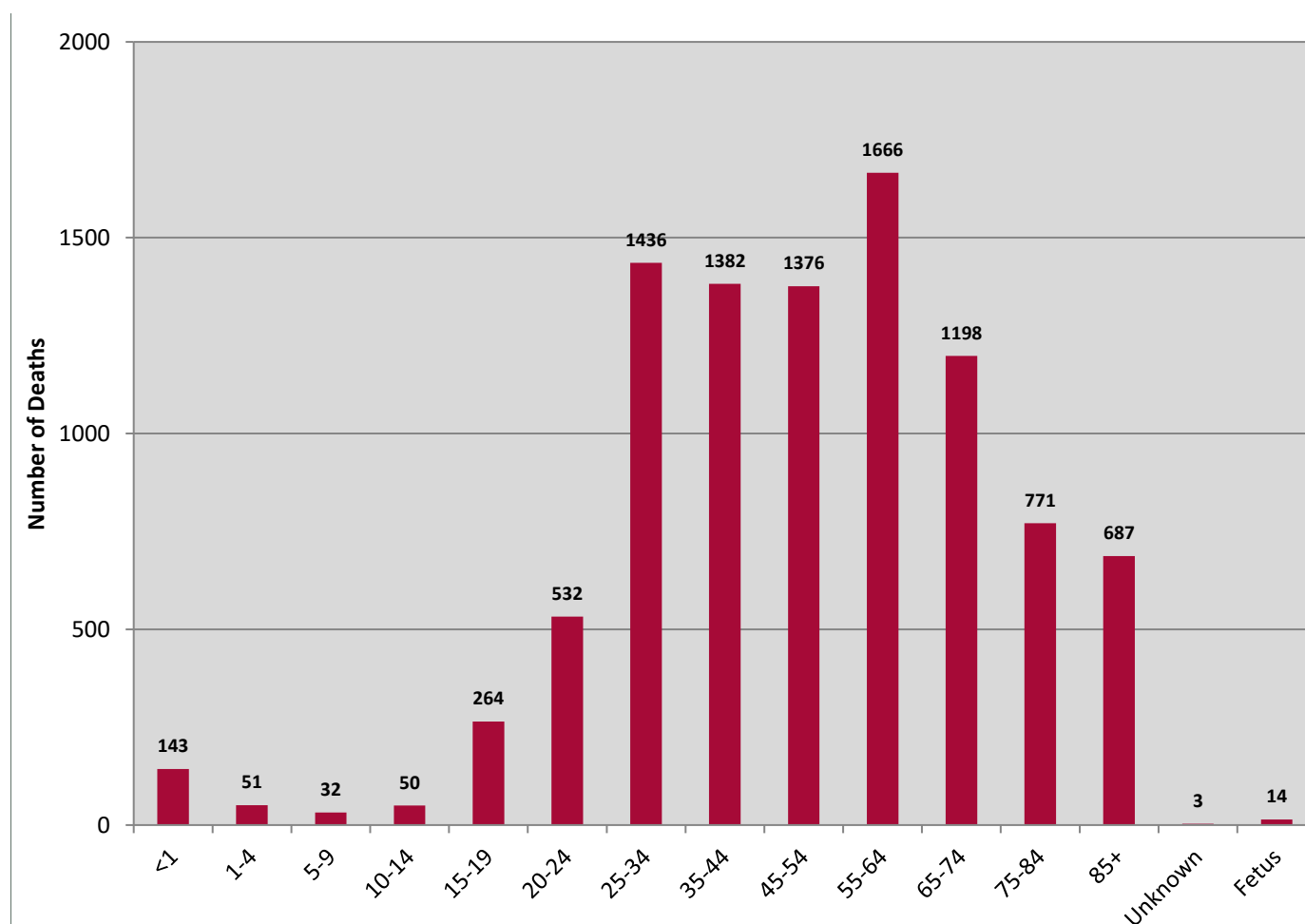
Age Group	Autopsy Performed			Total
	Yes	No	% Yes	
<1	139	4	97.2%	143
1-4	38	13	74.5%	51
5-9	19	13	59.4%	32
10-14	39	11	78.0%	50
15-19	203	61	76.9%	264
20-24	395	137	74.2%	532
25-34	886	550	61.7%	1436
35-44	522	860	37.8%	1382
45-54	309	1067	22.5%	1376
55-64	313	1353	18.8%	1666
65-74	267	931	22.3%	1198
75-84	143	628	18.5%	771
85+	61	626	8.9%	687
Unknown	3	0	100.0%	3
Fetus	10	4	71.4%	14
TOTAL	3347	6258	34.8%	9605

Table 1.5 Number and Percentage of OCME Cases by Race/Ethnicity, 2021

Race/Ethnicity	Cases	Percent
Asian	164	1.4%
Black	2558	25.9%
Hispanic	296	3.4%
Native American	14	0.1%
White	6308	66.8%
Other	255	2.4%
Unknown	10	0.1%
TOTAL	9605	100.1%

Figure 1.4 Number of OCME Cases by Manner of Death and Race/Ethnicity, 2021

* Fetal deaths are omitted from manner of death classifications. This is because fetal deaths are not given a certification of live birth in Virginia and thus, do not receive a death certificate. In 2021, the OCME accepted fourteen fetal deaths under OCME jurisdiction of the 3,462 total fetal deaths reported to Vital Records

Figure 1.5 Number of OCME Cases by Age Group, 2021

* Fetal deaths are omitted from manner of death classifications. This is because fetal deaths are not given a certification of live birth in Virginia and thus, do not receive a death certificate. In 2021, the OCME accepted fourteen fetal deaths under OCME jurisdiction of the 3,462 total fetal deaths reported to Vital Records

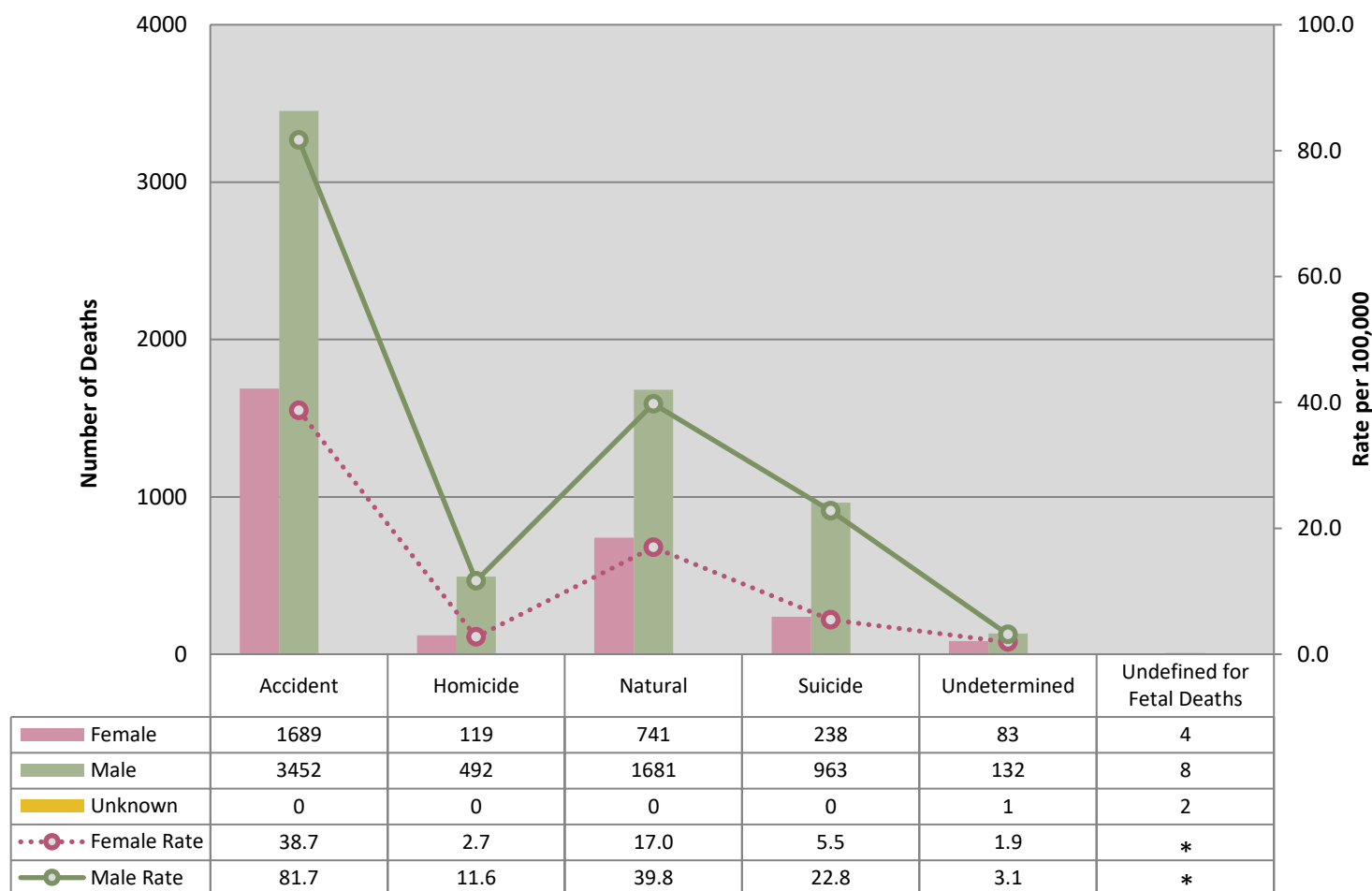
Table 1.6 Number and Percentage of OCME Cases by Race/Ethnicity, 2021

Race/Ethnicity	Cases	Percent
Asian	164	1.4%
Black	2558	25.9%
Hispanic	296	3.4%
Native American	14	0.1%
White	6308	66.8%
Other	255	2.4%
Unknown	10	0.1%
TOTAL	9605	100.1%

Table 1.7 Number and Percentage of OCME Cases by Manner of Death and Gender, 2021

Manner of Death	Female		Male		Unknown		Total	
	N	%	N	%	N	%	N	%
Accident	1689	17.3%	3452	34.3%	0	0.0%	5141	51.6%
Homicide	119	1.3%	492	5.1%	0	0.0%	611	6.3%
Natural	741	7.9%	1681	18.0%	0	0.0%	2422	25.9%
Suicide	238	3.0%	963	10.9%	0	0.0%	1201	13.9%
Undetermined	83	0.9%	132	1.2%	1	0.0%	216	2.2%
Undefined for Fetal Deaths	4	0.0%	8	0.1%	2	0.0%	14	0.1%
Total	2874	30.4%	6728	69.5%	3	0.0%	9605	100.0%

* Fetal deaths are omitted from manner of death classifications. This is because fetal deaths are not given a certification of live birth in Virginia and thus, do not receive a death certificate. In 2021, the OCME accepted fourteen fetal deaths under OCME jurisdiction of the 3,462 total fetal deaths reported to Vital Records

Figure 1.6 Number and Rate of OCME Cases by Manner of Death and Gender, 2021

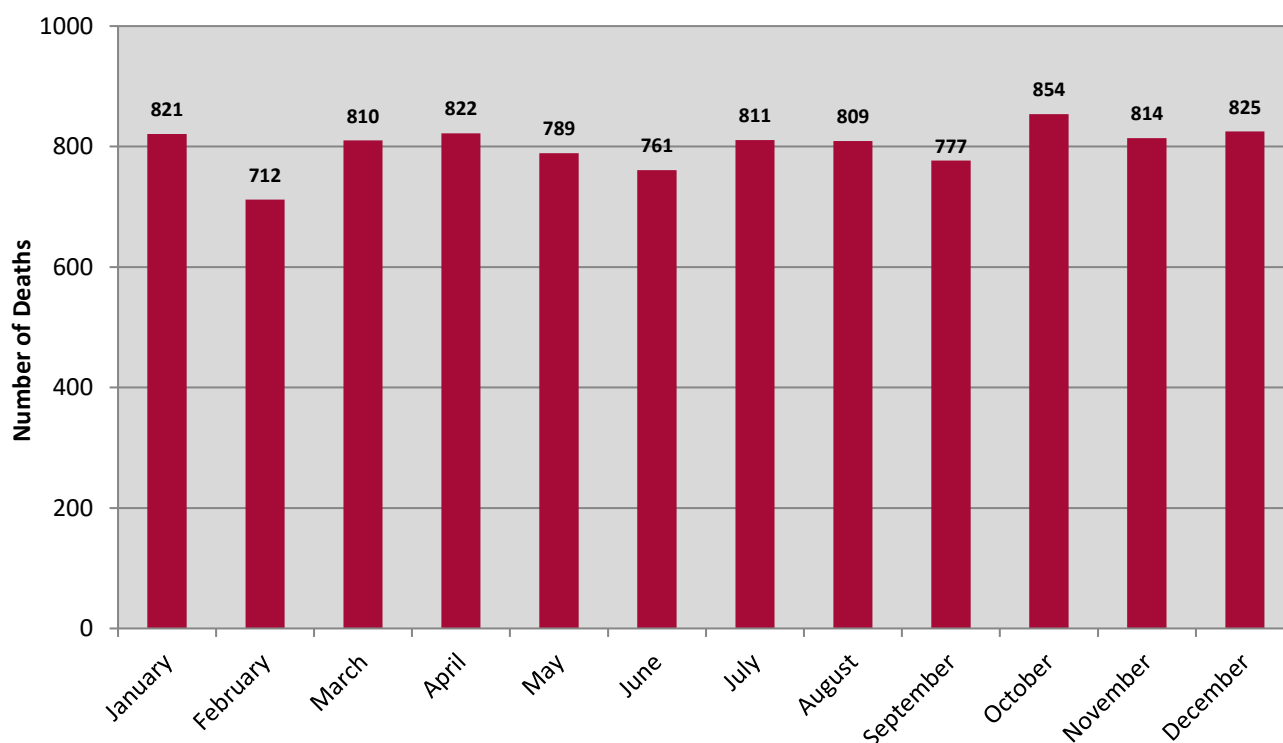
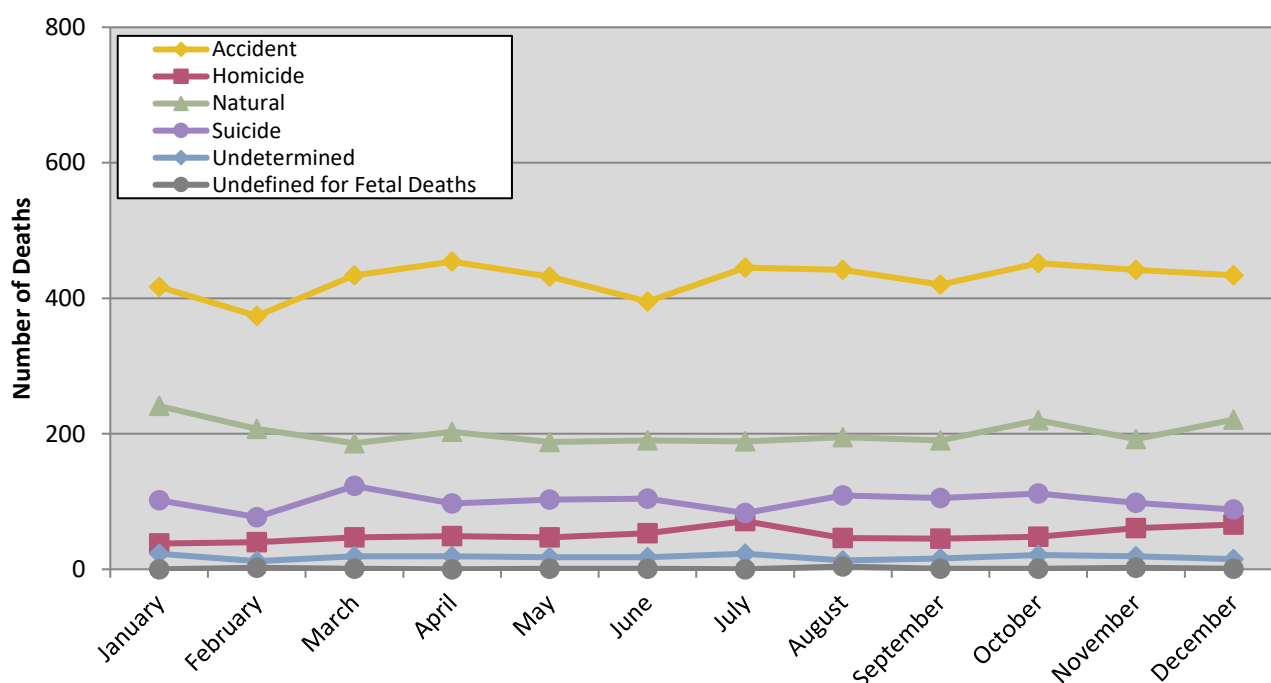
* No denominator for which to calculate rate

* Fetal deaths are omitted from manner of death classifications. This is because fetal deaths are not given a certification of live birth in Virginia and thus, do not receive a death certificate. In 2020, the OCME accepted nine fetal deaths under OCME jurisdiction of the 3,411 total fetal deaths reported to Vital Records

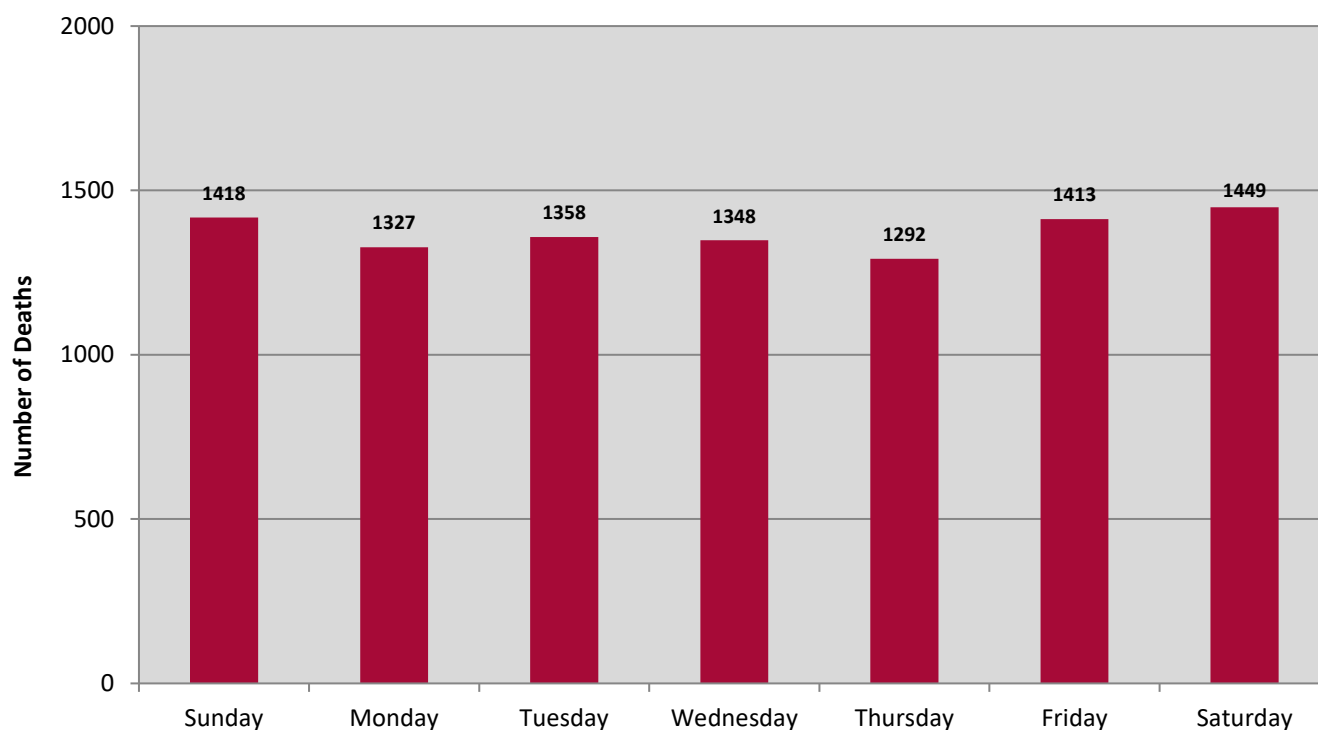
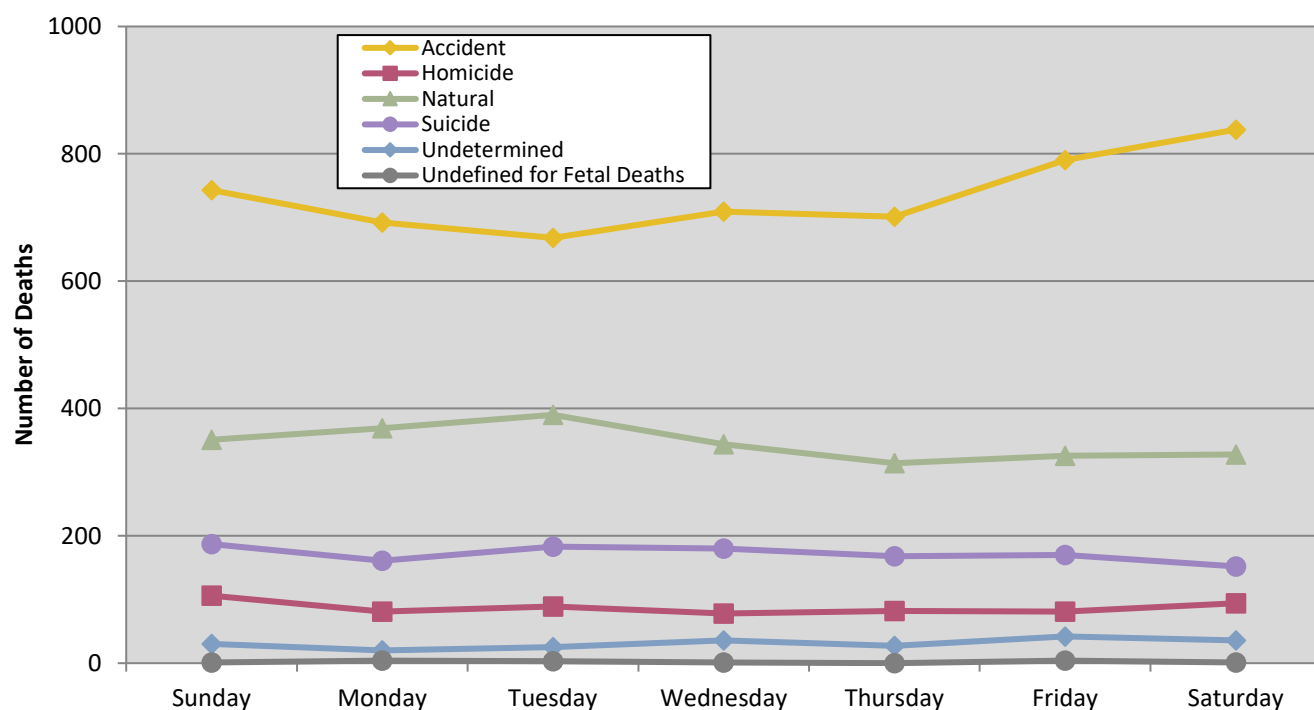
Table 1.8 Number of OCME Cases by Manner of Death, Gender, and Age Group, 2021

Gender	Age Group	Accident	Homicide	Natural	Suicide	Undetermined	Undefined for Fetal Deaths	Total
Female	<1	11	5	4	0	44	0	64
	1-4	12	0	7	0	1	0	20
	5-9	8	0	1	0	1	0	10
	10-14	6	3	4	5	0	0	18
	15-19	33	9	4	15	2	0	63
	20-24	87	9	13	15	1	0	125
	25-34	257	31	67	36	8	0	399
	35-44	235	19	68	41	8	0	371
	45-54	219	15	90	44	4	0	372
	55-64	216	12	158	43	4	0	433
	65-74	139	10	164	22	6	0	341
	75-84	180	5	85	11	1	0	282
	85+	286	1	76	6	3	0	372
	Unknown	0	0	0	0	0	0	0
	Fetus	0	0	0	0	0	4	4
	Subtotal	1689	119	741	238	83	4	2874
Male	<1	9	3	11	0	56	0	79
	1-4	19	1	7	0	4	0	31
	5-9	11	5	4	1	1	0	22
	10-14	12	7	3	9	1	0	32
	15-19	64	73	11	45	8	0	201
	20-24	187	82	16	112	10	0	407
	25-34	624	123	89	184	17	0	1037
	35-44	593	85	180	145	8	0	1011
	45-54	516	52	303	124	9	0	1004
	55-64	562	34	499	130	8	0	1233
	65-74	349	24	361	117	6	0	857
	75-84	270	3	146	67	3	0	489
	85+	235	0	51	29	0	0	315
	Unknown	1	0	0	0	1	0	2
	Fetus	0	0	0	0	0	8	8
	Subtotal	3452	492	1681	963	132	8	6728
Unknown	Unknown	0	0	0	0	1	0	1
	Fetus	0	0	0	0	0	2	2
	Subtotal	0	0	0	0	1	2	3
TOTAL		5141	611	2422	1201	216	14	9605

* Fetal deaths are omitted from manner of death classifications. This is because fetal deaths are not given a certification of live birth in Virginia and thus, do not receive a death certificate. In 2020, the OCME accepted nine fetal deaths under OCME jurisdiction of the 3,411 total fetal deaths reported to Vital Records

Figure 1.7 Number of OCME Cases by Month of Death, 2021**Figure 1.8 Number of OCME Cases by Month and Manner of Death, 2021**

* Fetal deaths are omitted from manner of death classifications. This is because fetal deaths are not given a certification of live birth in Virginia and thus, do not receive a death certificate. In 2020, the OCME accepted nine fetal deaths under OCME jurisdiction of the 3,411 total fetal deaths reported to Vital Records

Figure 1.9 Number of OCME Cases by Day of Death, 2021**Figure 1.10 Number of OCME Cases by Day and Manner of Death, 2021**

* Fetal deaths are omitted from manner of death classifications. This is because fetal deaths are not given a certification of live birth in Virginia and thus, do not receive a death certificate. In 2020, the OCME accepted nine fetal deaths under OCME jurisdiction of the 3,411 total fetal deaths reported to Vital Records

Table 1.9 Number and Rate of OCME Cases by Manner of Death and Locality of Residence, 2021

Locality of Residence	Accident Total	Accident Rate	Homicide Total	Homicide Rate	Natural Total	Natural Rate	Suicide Total	Suicide Rate	Undet. Total	Undet. Rate	Total	Total Rate
Accomack County	18	55.8	9	27.9	10	31.0	6	18.6	2	6.2	45	139.6
Albemarle County	52	47.0	2	1.8	30	27.1	22	19.9	1	0.9	107	96.7
Alexandria City	44	27.7	1	0.6	25	15.8	11	6.9	2	1.3	83	52.3
Alleghany County	17	115.6	1	6.8	6	40.8	7	47.6	0	0.0	31	210.9
Amelia County	11	84.5	0	0.0	8	61.5	3	23.1	3	23.1	25	192.1
Amherst County	31	97.9	1	3.2	21	66.3	7	22.1	1	3.2	61	192.6
Appomattox County	13	81.0	1	6.2	2	12.5	3	18.7	1	6.2	20	124.7
Arlington County	44	18.3	0	0.0	37	15.4	12	5.0	3	1.2	96	40.0
Augusta County	45	58.8	2	2.6	30	39.2	16	20.9	3	3.9	96	125.4
Bath County	2	48.6	0	0.0	0	0.0	0	0.0	1	24.3	3	72.8
Bedford County	66	82.7	2	2.5	28	35.1	17	21.3	1	1.3	114	142.8
Bland County	3	48.1	0	0.0	3	48.1	0	0.0	0	0.0	6	96.2
Botetourt County	26	77.3	2	5.9	10	29.7	3	8.9	0	0.0	41	121.9
Bristol City	8	46.2	0	0.0	3	17.3	2	11.5	1	5.8	14	80.8
Brunswick County	12	74.8	2	12.5	4	24.9	3	18.7	0	0.0	21	130.9
Buchanan County	16	77.6	1	4.9	7	34.0	1	4.9	1	4.9	26	126.1
Buckingham County	13	75.7	3	17.5	9	52.4	5	29.1	0	0.0	30	174.7
Buena Vista City	10	156.2	0	0.0	6	93.7	0	0.0	0	0.0	16	249.9
Campbell County	35	63.3	2	3.6	21	38.0	8	14.5	2	3.6	68	123.0
Caroline County	29	94.0	1	3.2	12	38.9	6	19.4	1	3.2	49	158.8
Carroll County	18	59.9	1	3.3	20	66.5	8	26.6	0	0.0	47	156.3
Charles City County	6	88.0	0	0.0	4	58.6	1	14.7	0	0.0	11	161.3
Charlotte County	23	194.6	0	0.0	7	59.2	6	50.8	0	0.0	36	304.6
Charlottesville City	30	63.9	1	2.1	14	29.8	2	4.3	0	0.0	48	102.2
Chesapeake City	96	38.9	25	10.1	79	32.0	36	14.6	5	2.0	241	97.6
Chesterfield County	234	65.3	35	9.8	90	25.1	56	15.6	5	1.4	421	117.5
Clarke County	14	95.7	0	0.0	3	20.5	1	6.8	1	6.8	19	129.9
Colonial Heights City	14	81.4	1	5.8	6	34.9	1	5.8	1	5.8	24	139.5
Covington City	5	88.7	0	0.0	5	88.7	0	0.0	0	0.0	10	177.3
Craig County	4	78.8	0	0.0	2	39.4	2	39.4	0	0.0	8	157.6

Locality of Residence	Accident Total	Accident Rate	Homicide Total	Homicide Rate	Natural Total	Natural Rate	Suicide Total	Suicide Rate	Undet. Total	Undet. Rate	Total	Total Rate
Culpeper County	36	67.2	3	5.6	16	29.9	5	9.3	0	0.0	60	112.0
Cumberland County	4	40.3	1	10.1	1	10.1	1	10.1	1	10.1	8	80.5
Danville City	36	90.3	10	25.1	19	47.7	7	17.6	3	7.5	75	188.1
Dickenson County	8	56.8	2	14.2	4	28.4	6	42.6	0	0.0	20	142.1
Dinwiddie County	31	108.1	3	10.5	8	27.9	2	7.0	0	0.0	44	153.4
Emporia City	7	133.2	2	38.0	2	38.0	2	38.0	0	0.0	13	247.3
Essex County	14	127.9	1	9.1	3	27.4	3	27.4	0	0.0	21	191.9
Fairfax City	10	42.7	1	4.3	3	12.8	3	12.8	1	4.3	18	76.8
Fairfax County	263	22.9	20	1.7	158	13.7	93	8.1	9	0.8	543	47.2
Falls Church City	2	13.7	1	6.8	1	6.8	0	0.0	1	6.8	5	34.2
Fauquier County	32	44.8	5	7.0	14	19.6	9	12.6	0	0.0	60	84.1
Floyd County	13	82.4	2	12.7	8	50.7	3	19.0	0	0.0	26	164.8
Fluvanna County	14	51.1	0	0.0	4	14.6	2	7.3	1	3.6	21	76.6
Franklin City	4	51.1	1	12.8	5	63.8	1	12.8	1	12.8	12	153.2
Franklin County	54	96.1	6	10.7	12	21.4	4	7.1	0	0.0	76	135.3
Frederick County	39	42.8	2	2.2	9	9.9	17	18.7	3	3.3	70	76.8
Fredericksburg City	28	94.9	2	6.8	12	40.7	4	13.6	0	0.0	46	156.0
Galax City	2	31.8	0	0.0	5	79.4	3	47.6	0	0.0	10	158.8
Giles County	12	72.0	1	6.0	9	54.0	5	30.0	1	6.0	28	168.0
Gloucester County	30	80.1	0	0.0	14	37.4	4	10.7	1	2.7	49	130.8
Goochland County	12	49.1	1	4.1	13	53.2	6	24.6	0	0.0	32	131.0
Grayson County	10	64.5	0	0.0	8	51.6	3	19.4	1	6.5	22	142.0
Greene County	7	34.8	0	0.0	1	5.0	3	14.9	0	0.0	11	54.6
Greensville County	13	115.2	1	8.9	16	141.8	0	0.0	1	8.9	31	274.8
Halifax County	35	104.1	2	5.9	16	47.6	5	14.9	1	3.0	59	175.4
Hampton City	82	60.5	28	20.7	45	33.2	20	14.8	10	7.4	186	137.3
Hanover County	56	51.7	2	1.8	25	23.1	18	16.6	1	0.9	102	94.2
Harrisonburg City	24	45.1	1	1.9	7	13.2	8	15.0	1	1.9	41	77.1
Henrico County	196	58.7	30	9.0	69	20.7	40	12.0	13	3.9	348	104.3
Henry County	80	159.0	3	6.0	20	39.8	10	19.9	0	0.0	113	224.6

Locality of Residence	Accident Total	Accident Rate	Homicide Total	Homicide Rate	Natural Total	Natural Rate	Suicide Total	Suicide Rate	Undet. Total	Undet. Rate	Total	Total Rate
Highland County	1	45.5	0	0.0	1	45.5	0	0.0	0	0.0	2	90.9
Hopewell City	40	178.8	3	13.4	18	80.4	3	13.4	1	4.5	65	290.5
Isle of Wight County	19	50.4	2	5.3	9	23.9	9	23.9	1	2.7	40	106.0
James City County	41	52.8	4	5.2	20	25.8	14	18.0	3	3.9	82	105.7
King and Queen County	13	187.3	0	0.0	3	43.2	3	43.2	0	0.0	19	273.7
King George County	7	25.6	1	3.7	3	11.0	1	3.7	0	0.0	12	43.8
King William County	17	96.4	0	0.0	7	39.7	3	17.0	0	0.0	27	153.1
Lancaster County	11	103.6	0	0.0	6	56.5	2	18.8	0	0.0	19	178.9
Lee County	6	25.8	3	12.9	9	38.7	2	8.6	1	4.3	21	90.4
Lexington City	4	55.0	0	0.0	1	13.7	0	0.0	0	0.0	5	68.7
Loudoun County	77	18.2	4	0.9	39	9.2	30	7.1	6	1.4	156	36.9
Louisa County	31	81.3	1	2.6	9	23.6	1	2.6	1	2.6	44	115.4
Lunenburg County	9	73.4	0	0.0	6	48.9	5	40.8	1	8.2	21	171.2
Lynchburg City	63	77.2	10	12.3	21	25.7	4	4.9	3	3.7	101	123.8
Madison County	8	60.1	1	7.5	4	30.0	2	15.0	0	0.0	15	112.7
Manassas City	21	51.4	0	0.0	6	14.7	1	2.4	0	0.0	28	68.5
Manassas Park City	11	61.1	1	5.6	7	38.9	0	0.0	0	0.0	19	105.5
Martinsville City	17	137.6	2	16.2	6	48.6	2	16.2	3	24.3	30	242.8
Mathews County	7	79.9	0	0.0	7	79.9	3	34.2	1	11.4	18	205.3
Mecklenburg County	28	91.3	4	13.0	20	65.2	7	22.8	1	3.3	60	195.6
Middlesex County	12	113.5	0	0.0	4	37.8	4	37.8	1	9.5	21	198.7
Montgomery County	40	40.7	2	2.0	18	18.3	17	17.3	0	0.0	77	78.3
Nelson County	14	94.9	0	0.0	7	47.4	2	13.6	0	0.0	23	155.9
New Kent County	18	76.1	0	0.0	5	21.1	0	0.0	0	0.0	23	97.3
Newport News City	118	65.9	31	17.3	55	30.7	23	12.8	10	5.6	237	132.4
Norfolk City	174	71.7	50	20.6	90	37.1	39	16.1	15	6.2	369	152.0
Northampton County	13	111.4	1	8.6	11	94.2	2	17.1	0	0.0	27	231.3
Northumberland County	13	107.7	0	0.0	7	58.0	3	24.9	0	0.0	23	190.6
Norton City	2	50.2	1	25.1	3	75.3	0	0.0	0	0.0	6	150.6
Nottoway County	13	85.8	0	0.0	11	72.6	3	19.8	0	0.0	27	178.1

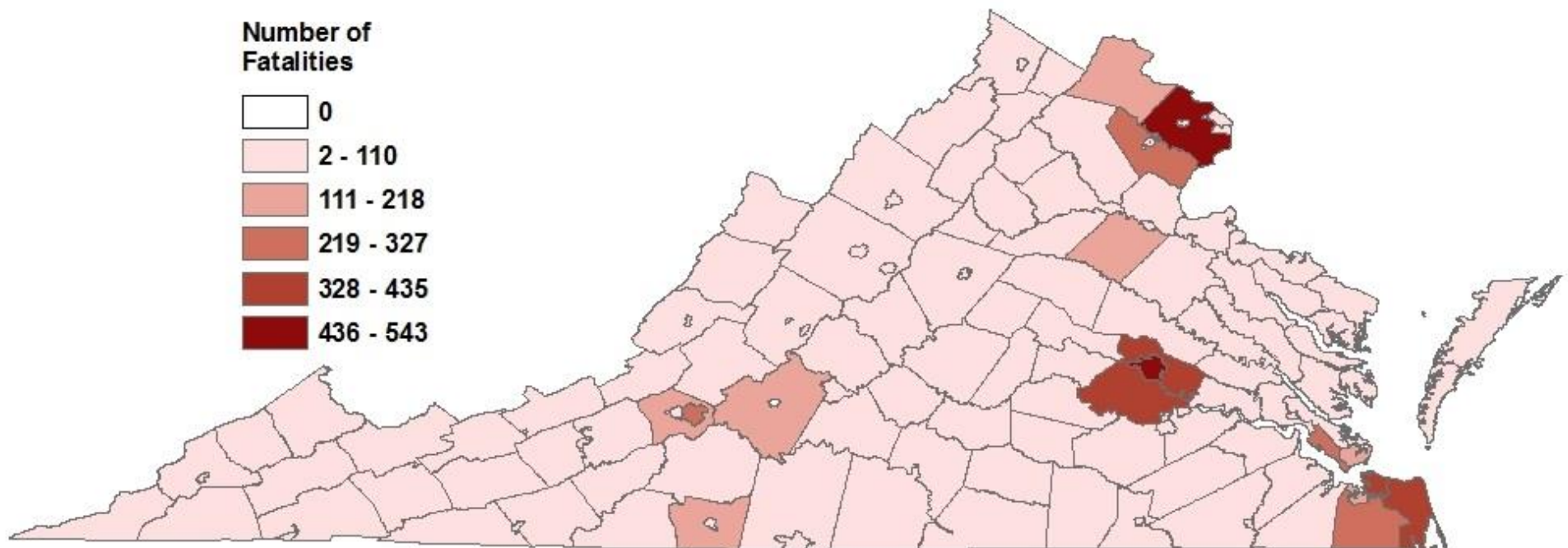
Locality of Residence	Accident Total	Accident Rate	Homicide Total	Homicide Rate	Natural Total	Natural Rate	Suicide Total	Suicide Rate	Undet. Total	Undet. Rate	Total	Total Rate
Orange County	32	84.9	2	5.3	7	18.6	7	18.6	0	0.0	48	127.3
Page County	16	66.9	4	16.7	3	12.5	6	25.1	1	4.2	30	125.3
Patrick County	21	120.0	0	0.0	6	34.3	5	28.6	0	0.0	32	182.9
Petersburg City	40	131.4	14	46.0	20	65.7	4	13.1	3	9.9	82	269.3
Pittsylvania County	47	78.5	1	1.7	28	46.8	14	23.4	2	3.3	92	153.7
Poquoson City	7	57.1	0	0.0	2	16.3	3	24.5	0	0.0	12	97.9
Portsmouth City	114	119.9	29	30.5	43	45.2	10	10.5	4	4.2	200	210.3
Powhatan County	22	73.0	1	3.3	10	33.2	7	23.2	1	3.3	41	136.0
Prince Edward County	17	73.9	0	0.0	10	43.5	3	13.0	2	8.7	32	139.1
Prince George County	30	77.5	2	5.2	5	12.9	5	12.9	1	2.6	43	111.2
Prince William County	141	29.7	12	2.5	71	14.9	54	11.4	5	1.1	284	59.7
Pulaski County	34	100.2	2	5.9	18	53.0	9	26.5	0	0.0	63	185.6
Radford City	5	27.4	0	0.0	6	32.9	2	11.0	0	0.0	13	71.2
Rappahannock County	5	68.9	0	0.0	2	27.5	1	13.8	0	0.0	8	110.2
Richmond City	259	111.5	69	29.7	77	33.2	35	15.1	12	5.2	453	195.1
Richmond County	8	88.2	0	0.0	4	44.1	1	11.0	0	0.0	13	143.3
Roanoke City	136	137.3	17	17.2	46	46.4	22	22.2	3	3.0	224	226.1
Roanoke County	72	76.2	3	3.2	26	27.5	18	19.0	1	1.1	120	127.0
Rockbridge County	11	48.3	1	4.4	11	48.3	4	17.6	1	4.4	28	123.0
Rockingham County	38	46.1	4	4.9	18	21.9	14	17.0	2	2.4	76	92.3
Russell County	12	45.0	1	3.8	14	52.5	2	7.5	0	0.0	29	108.8
Salem City	15	59.2	3	11.8	7	27.6	5	19.7	1	3.9	31	122.3
Scott County	7	32.4	0	0.0	3	13.9	2	9.2	1	4.6	13	60.1
Shenandoah County	21	47.8	1	2.3	11	25.1	9	20.5	0	0.0	42	95.7
Smyth County	18	59.8	1	3.3	9	29.9	5	16.6	0	0.0	33	109.7
Southampton County	9	51.0	1	5.7	19	107.7	6	34.0	0	0.0	35	198.5
Spotsylvania County	93	67.2	7	5.1	30	21.7	15	10.8	1	0.7	147	106.2
Stafford County	61	38.9	3	1.9	26	16.6	16	10.2	0	0.0	106	67.6
Staunton City	11	43.7	0	0.0	18	71.5	5	19.8	0	0.0	34	135.0
Suffolk City	54	57.5	10	10.6	25	26.6	11	11.7	2	2.1	102	108.6

Locality of Residence	Accident Total	Accident Rate	Homicide Total	Homicide Rate	Natural Total	Natural Rate	Suicide Total	Suicide Rate	Undet. Total	Undet. Rate	Total	Total Rate
Surry County	3	47.0	0	0.0	6	94.0	2	31.3	0	0.0	11	172.3
Sussex County	9	82.4	1	9.2	11	100.7	1	9.2	2	18.3	24	219.7
Tazewell County	48	118.4	1	2.5	17	41.9	4	9.9	1	2.5	71	175.2
Virginia Beach City	209	46.3	25	5.5	111	24.6	65	14.4	13	2.9	423	93.7
Warren County	27	66.7	0	0.0	14	34.6	8	19.8	2	4.9	51	126.0
Washington County	27	50.3	0	0.0	22	41.0	10	18.6	2	3.7	61	113.6
Waynesboro City	15	66.0	0	0.0	5	22.0	5	22.0	1	4.4	26	114.3
Westmoreland County	15	82.6	0	0.0	12	66.1	1	5.5	0	0.0	28	154.3
Williamsburg City	2	13.1	0	0.0	4	26.2	4	26.2	0	0.0	10	65.5
Winchester City	15	54.2	1	3.6	12	43.3	2	7.2	2	7.2	32	115.5
Wise County	27	72.6	1	2.7	18	48.4	8	21.5	0	0.0	55	147.8
Wythe County	17	59.4	1	3.5	14	48.9	7	24.5	0	0.0	39	136.3
York County	24	34.7	1	1.4	8	11.6	4	5.8	0	0.0	37	53.5
Subtotal (in-state)	4735	55.1	564	6.6	2271	26.4	1138	13.2	199	2.3	8918	103.8
Out of State	378	ND	43	ND	130	ND	60	ND	9	ND	620	ND
Unknown	28	ND	4	ND	21	ND	3	ND	8	ND	67	ND
Subtotal (out-of-state)	406	ND	47	ND	151	ND	63	ND	17	ND	687	ND
TOTAL	5141	59.8	611	7.1	2422	28.2	1201	14.0	216	2.5	9605	111.8

* 'ND' represents no denominator for which to calculate rate

** Fatalities certified as 'undefined for fetal deaths' manner of death are omitted by counts and rates by locality because of small case counts, but are included in the summed total

Map 1.1 Number of OCME Cases by Locality of Residence, 2021



Map 1.2 Rates of OCME Cases by Locality of Residence, 2021

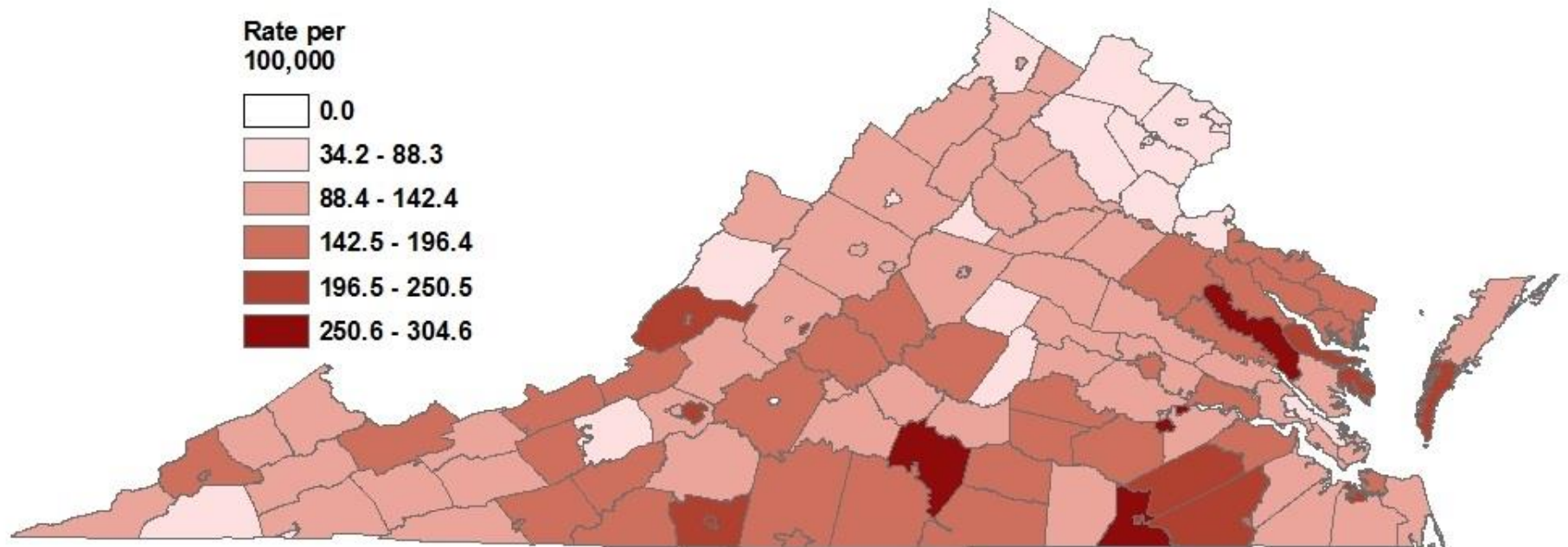


Table 1.10 Number and Rate of OCME Cases by Manner of Death and Locality of Injury, 2021

Locality of Injury	Accident Total	Accident Rate	Homicide Total	Homicide Rate	Natural Total	Natural Rate	Suicide Total	Suicide Rate	Undet. Total	Undet. Rate	Total	Total Rate
Accomack County	21	65.1	9	27.9	10	31.0	6	18.6	2	6.2	48	148.9
Albemarle County	58	52.4	0	0.0	24	21.7	21	19.0	0	0.0	104	94.0
Alexandria City	42	26.5	2	1.3	29	18.3	11	6.9	2	1.3	86	54.2
Alleghany County	20	136.0	0	0.0	5	34.0	6	40.8	0	0.0	31	210.9
Amelia County	7	53.8	0	0.0	7	53.8	3	23.1	3	23.1	20	153.7
Amherst County	30	94.7	2	6.3	21	66.3	7	22.1	1	3.2	61	192.6
Appomattox County	12	74.8	1	6.2	3	18.7	2	12.5	1	6.2	19	118.4
Arlington County	58	24.2	1	0.4	42	17.5	12	5.0	3	1.2	116	48.3
Augusta County	52	67.9	2	2.6	31	40.5	16	20.9	4	5.2	105	137.2
Bath County	3	72.8	0	0.0	0	0.0	0	0.0	1	24.3	4	97.1
Bedford County	62	77.7	4	5.0	24	30.1	21	26.3	2	2.5	113	141.6
Bland County	3	48.1	0	0.0	4	64.1	0	0.0	0	0.0	7	112.2
Botetourt County	28	83.3	0	0.0	10	29.7	4	11.9	0	0.0	42	124.9
Bristol City	12	69.2	1	5.8	6	34.6	3	17.3	2	11.5	24	138.5
Brunswick County	25	155.9	1	6.2	5	31.2	3	18.7	0	0.0	34	212.0
Buchanan County	14	67.9	1	4.9	7	34.0	1	4.9	1	4.9	24	116.4
Buckingham County	12	69.9	1	5.8	6	34.9	4	23.3	0	0.0	23	134.0
Buena Vista City	4	62.5	0	0.0	5	78.1	0	0.0	1	15.6	10	156.2
Campbell County	38	68.7	3	5.4	21	38.0	8	14.5	1	1.8	71	128.4
Caroline County	33	106.9	3	9.7	13	42.1	8	25.9	1	3.2	58	187.9
Carroll County	19	63.2	1	3.3	20	66.5	9	29.9	0	0.0	49	162.9
Charles City County	6	88.0	0	0.0	4	58.6	3	44.0	0	0.0	13	190.6
Charlotte County	18	152.3	0	0.0	5	42.3	5	42.3	0	0.0	28	236.9
Charlottesville City	34	72.4	0	0.0	24	51.1	5	10.6	0	0.0	63	134.2
Chesapeake City	99	40.1	24	9.7	83	33.6	38	15.4	2	0.8	246	99.6
Chesterfield County	204	56.9	14	3.9	90	25.1	57	15.9	6	1.7	372	103.8
Clarke County	12	82.1	0	0.0	2	13.7	1	6.8	1	6.8	16	109.4
Colonial Heights City	10	58.1	3	17.4	5	29.1	2	11.6	1	5.8	21	122.1
Covington City	4	70.9	0	0.0	5	88.7	0	0.0	0	0.0	9	159.6
Craig County	3	59.1	1	19.7	3	59.1	3	59.1	0	0.0	10	197.0

Locality of Injury	Accident Total	Accident Rate	Homicide Total	Homicide Rate	Natural Total	Natural Rate	Suicide Total	Suicide Rate	Undet. Total	Undet. Rate	Total	Total Rate
Culpeper County	32	59.7	2	3.7	14	26.1	5	9.3	0	0.0	53	98.9
Cumberland County	8	80.5	0	0.0	2	20.1	0	0.0	1	10.1	11	110.7
Danville City	41	102.8	6	15.0	19	47.7	9	22.6	3	7.5	78	195.6
Dickenson County	8	56.8	1	7.1	4	28.4	7	49.7	0	0.0	20	142.1
Dinwiddie County	27	94.1	4	13.9	14	48.8	1	3.5	0	0.0	46	160.3
Emporia City	5	95.1	1	19.0	3	57.1	2	38.0	0	0.0	11	209.2
Essex County	13	118.8	1	9.1	4	36.6	3	27.4	0	0.0	21	191.9
Fairfax City	10	42.7	0	0.0	3	12.8	2	8.5	1	4.3	16	68.3
Fairfax County	300	26.1	25	2.2	175	15.2	94	8.2	9	0.8	603	52.4
Falls Church City	3	20.5	0	0.0	1	6.8	0	0.0	0	0.0	4	27.3
Fauquier County	36	50.4	4	5.6	15	21.0	12	16.8	0	0.0	67	93.9
Floyd County	15	95.1	1	6.3	8	50.7	3	19.0	0	0.0	27	171.1
Fluvanna County	9	32.8	0	0.0	4	14.6	2	7.3	1	3.6	16	58.3
Franklin City	2	25.5	2	25.5	6	76.6	1	12.8	0	0.0	11	140.4
Franklin County	54	96.1	6	10.7	9	16.0	8	14.2	0	0.0	77	137.1
Frederick County	44	48.3	2	2.2	12	13.2	15	16.5	3	3.3	76	83.4
Fredericksburg City	33	111.9	3	10.2	14	47.5	3	10.2	0	0.0	53	179.7
Galax City	2	31.8	0	0.0	6	95.3	3	47.6	0	0.0	11	174.7
Giles County	15	90.0	1	6.0	9	54.0	6	36.0	1	6.0	32	192.0
Gloucester County	27	72.1	0	0.0	12	32.0	5	13.3	3	8.0	47	125.5
Goochland County	14	57.3	1	4.1	6	24.6	8	32.7	0	0.0	29	118.7
Grayson County	9	58.1	0	0.0	9	58.1	4	25.8	1	6.5	23	148.5
Greene County	7	34.8	0	0.0	2	9.9	4	19.9	0	0.0	13	64.6
Greensville County	15	133.0	1	8.9	23	203.9	1	8.9	1	8.9	41	363.5
Halifax County	34	101.1	6	17.8	17	50.5	5	14.9	2	5.9	64	190.3
Hampton City	84	62.0	31	22.9	44	32.5	22	16.2	8	5.9	189	139.5
Hanover County	66	61.0	2	1.8	24	22.2	16	14.8	1	0.9	109	100.7
Harrisonburg City	25	47.0	2	3.8	10	18.8	11	20.7	1	1.9	49	92.1
Henrico County	232	69.5	25	7.5	65	19.5	43	12.9	11	3.3	377	113.0
Henry County	75	149.1	3	6.0	20	39.8	10	19.9	0	0.0	108	214.7

Locality of Injury	Accident Total	Accident Rate	Homicide Total	Homicide Rate	Natural Total	Natural Rate	Suicide Total	Suicide Rate	Undet. Total	Undet. Rate	Total	Total Rate
Highland County	2	90.9	0	0.0	1	45.5	0	0.0	0	0.0	3	136.4
Hopewell City	37	165.4	3	13.4	13	58.1	3	13.4	2	8.9	58	259.2
Isle of Wight County	22	58.3	2	5.3	6	15.9	10	26.5	1	2.7	41	108.7
James City County	38	49.0	2	2.6	21	27.1	12	15.5	2	2.6	76	97.9
King and Queen County	15	216.1	0	0.0	3	43.2	3	43.2	0	0.0	21	302.5
King George County	14	51.1	2	7.3	4	14.6	0	0.0	0	0.0	20	73.0
King William County	7	39.7	0	0.0	5	28.3	5	28.3	0	0.0	17	96.4
Lancaster County	10	94.2	0	0.0	6	56.5	2	18.8	0	0.0	18	169.5
Lee County	8	34.4	3	12.9	8	34.4	2	8.6	1	4.3	22	94.7
Lexington City	5	68.7	0	0.0	1	13.7	0	0.0	0	0.0	6	82.4
Loudoun County	70	16.6	4	0.9	42	9.9	35	8.3	4	0.9	155	36.7
Louisa County	33	86.5	1	2.6	9	23.6	1	2.6	1	2.6	46	120.6
Lunenburg County	10	81.5	1	8.2	9	73.4	4	32.6	1	8.2	25	203.8
Lynchburg City	74	90.7	9	11.0	24	29.4	5	6.1	2	2.5	114	139.8
Madison County	6	45.1	1	7.5	7	52.6	3	22.5	0	0.0	17	127.7
Manassas City	21	51.4	1	2.4	8	19.6	1	2.4	0	0.0	31	75.9
Manassas Park City	11	61.1	0	0.0	7	38.9	0	0.0	0	0.0	18	100.0
Martinsville City	18	145.7	3	24.3	7	56.7	2	16.2	3	24.3	33	267.1
Mathews County	7	79.9	0	0.0	5	57.0	3	34.2	1	11.4	16	182.5
Mecklenburg County	32	104.3	0	0.0	18	58.7	9	29.3	1	3.3	60	195.6
Middlesex County	12	113.5	0	0.0	4	37.8	3	28.4	1	9.5	20	189.2
Montgomery County	37	37.6	2	2.0	18	18.3	18	18.3	0	0.0	75	76.2
Nelson County	15	101.7	0	0.0	7	47.4	1	6.8	0	0.0	23	155.9
New Kent County	29	122.6	0	0.0	3	12.7	1	4.2	0	0.0	33	139.5
Newport News City	125	69.8	30	16.8	60	33.5	28	15.6	12	6.7	256	143.0
Norfolk City	185	76.2	64	26.4	88	36.2	43	17.7	19	7.8	400	164.7
Northampton County	13	111.4	0	0.0	13	111.4	2	17.1	0	0.0	28	239.9
Northumberland County	10	82.9	0	0.0	6	49.7	2	16.6	0	0.0	18	149.1
Norton City	3	75.3	0	0.0	3	75.3	0	0.0	0	0.0	6	150.6
Nottoway County	8	52.8	0	0.0	11	72.6	2	13.2	0	0.0	22	145.1

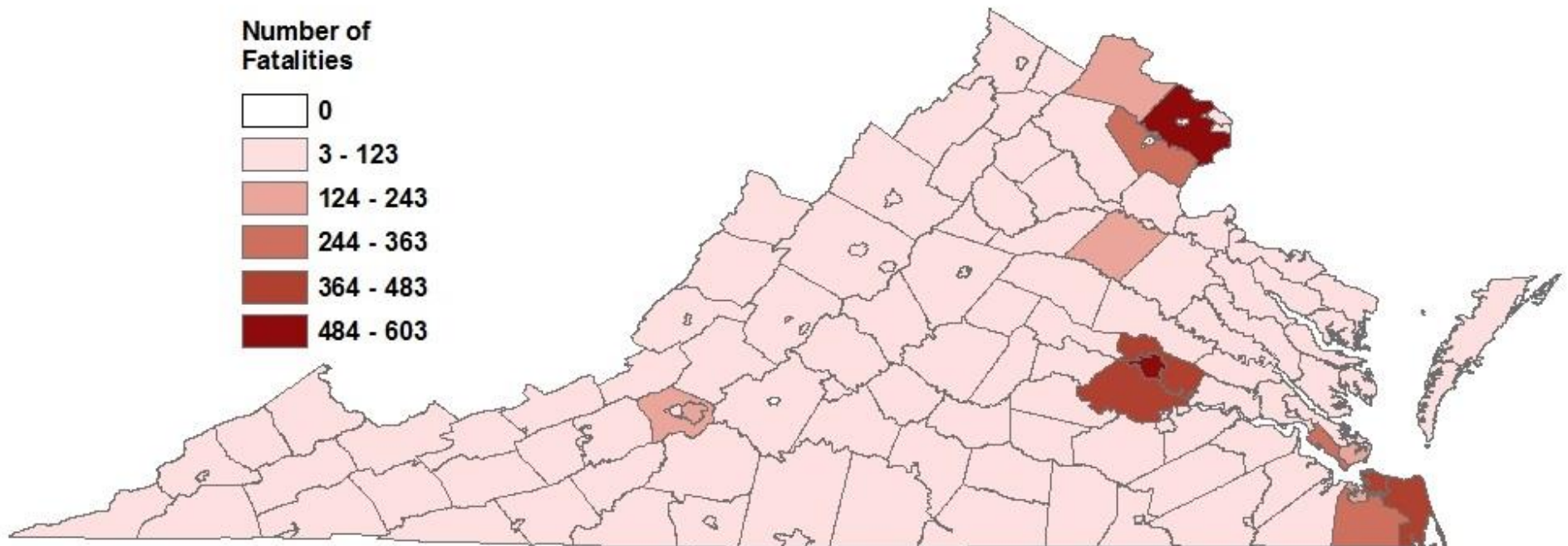
Locality of Injury	Accident Total	Accident Rate	Homicide Total	Homicide Rate	Natural Total	Natural Rate	Suicide Total	Suicide Rate	Undet. Total	Undet. Rate	Total	Total Rate
Orange County	26	69.0	2	5.3	9	23.9	5	13.3	0	0.0	42	111.4
Page County	16	66.9	3	12.5	4	16.7	7	29.2	1	4.2	31	129.5
Patrick County	23	131.5	0	0.0	6	34.3	3	17.1	0	0.0	32	182.9
Petersburg City	50	164.2	20	65.7	29	95.3	4	13.1	2	6.6	107	351.4
Pittsylvania County	41	68.5	4	6.7	26	43.4	13	21.7	2	3.3	86	143.7
Poquoson City	6	49.0	0	0.0	2	16.3	2	16.3	0	0.0	10	81.6
Portsmouth City	124	130.4	36	37.9	46	48.4	8	8.4	5	5.3	219	230.3
Powhatan County	19	63.0	0	0.0	10	33.2	8	26.5	1	3.3	38	126.0
Prince Edward County	16	69.5	2	8.7	14	60.9	6	26.1	1	4.3	39	169.5
Prince George County	35	90.5	3	7.8	6	15.5	6	15.5	1	2.6	51	131.8
Prince William County	144	30.3	13	2.7	73	15.4	48	10.1	3	0.6	282	59.3
Pulaski County	35	103.1	3	8.8	19	56.0	12	35.4	0	0.0	69	203.3
Radford City	7	38.3	0	0.0	7	38.3	3	16.4	0	0.0	17	93.1
Rappahannock County	7	96.4	1	13.8	2	27.5	1	13.8	0	0.0	11	151.5
Richmond City	323	139.1	106	45.6	96	41.3	32	13.8	12	5.2	569	245.0
Richmond County	8	88.2	0	0.0	4	44.1	0	0.0	0	0.0	12	132.3
Roanoke City	145	146.4	19	19.2	48	48.5	24	24.2	3	3.0	239	241.3
Roanoke County	73	77.2	3	3.2	31	32.8	15	15.9	3	3.2	125	132.3
Rockbridge County	16	70.3	1	4.4	11	48.3	5	22.0	0	0.0	33	145.0
Rockingham County	40	48.6	5	6.1	15	18.2	15	18.2	1	1.2	76	92.3
Russell County	13	48.8	1	3.8	13	48.8	3	11.3	0	0.0	30	112.6
Salem City	17	67.1	0	0.0	10	39.5	6	23.7	1	3.9	34	134.2
Scott County	7	32.4	1	4.6	3	13.9	4	18.5	0	0.0	15	69.4
Shenandoah County	24	54.7	1	2.3	11	25.1	9	20.5	2	4.6	47	107.0
Smyth County	25	83.1	1	3.3	12	39.9	7	23.3	0	0.0	45	149.6
Southampton County	14	79.4	0	0.0	19	107.7	6	34.0	0	0.0	39	221.1
Spotsylvania County	84	60.7	7	5.1	32	23.1	15	10.8	1	0.7	140	101.1
Stafford County	60	38.3	4	2.6	27	17.2	19	12.1	0	0.0	111	70.8
Staunton City	13	51.6	0	0.0	18	71.5	5	19.8	0	0.0	36	142.9
Suffolk City	47	50.0	7	7.5	23	24.5	12	12.8	2	2.1	91	96.9

Locality of Injury	Accident Total	Accident Rate	Homicide Total	Homicide Rate	Natural Total	Natural Rate	Suicide Total	Suicide Rate	Undet. Total	Undet. Rate	Total	Total Rate
Surry County	1	15.7	0	0.0	5	78.3	2	31.3	0	0.0	8	125.3
Sussex County	11	100.7	0	0.0	11	100.7	1	9.2	1	9.2	24	219.7
Tazewell County	48	118.4	1	2.5	18	44.4	7	17.3	1	2.5	75	185.1
Virginia Beach City	208	46.1	14	3.1	114	25.3	69	15.3	14	3.1	419	92.9
Warren County	33	81.5	0	0.0	16	39.5	9	22.2	2	4.9	60	148.2
Washington County	30	55.9	2	3.7	22	41.0	13	24.2	2	3.7	69	128.5
Waynesboro City	13	57.2	1	4.4	4	17.6	4	17.6	1	4.4	23	101.1
Westmoreland County	9	49.6	0	0.0	15	82.6	1	5.5	0	0.0	25	137.7
Williamsburg City	6	39.3	1	6.6	6	39.3	4	26.2	0	0.0	17	111.4
Winchester City	16	57.8	1	3.6	10	36.1	3	10.8	2	7.2	32	115.5
Wise County	28	75.3	3	8.1	19	51.1	5	13.4	0	0.0	56	150.5
Wythe County	24	83.9	0	0.0	15	52.4	6	21.0	0	0.0	45	157.2
York County	23	33.2	2	2.9	16	23.1	4	5.8	0	0.0	45	65.0
Subtotal (in-state)	4973	57.9	600	7.0	2382	27.7	1195	13.9	197	2.3	9361	109.0
Out of State	107	ND	2	ND	6	ND	5	ND	1	ND	121	ND
Unknown	61	ND	9	ND	34	ND	1	ND	18	ND	123	ND
Subtotal (out-of-state)	168	ND	11	ND	40	ND	6	ND	19	ND	244	ND
TOTAL	5141	59.8	611	7.1	2422	28.2	1201	14.0	216	2.5	9605	111.8

* 'ND' represents no denominator for which to calculate rate

** Fatalities certified as 'undefined for fetal deaths' manner of death are omitted by counts and rates by locality because of small case counts, but are included in the summed total

Map 1.3 Number of OCME Cases by Locality of Injury, 2021



Map 1.4 Rate of OCME Cases by Locality of Injury, 2021

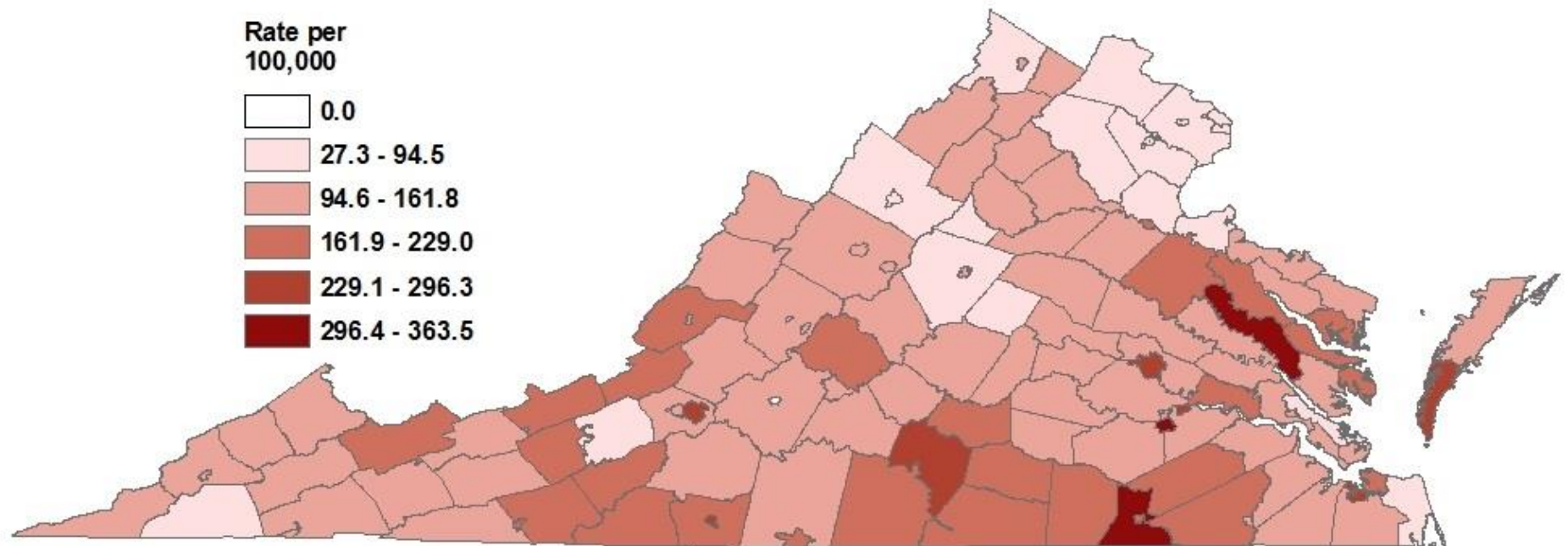


Table 1.11 Number of OCME Cases by Manner of Death and Locality of Death, 2021

Locality of Death	Accident Total	Homicide Total	Natural Total	Suicide Total	Undet. Total	Total
Accomack County	22	9	10	6	2	49
Albemarle County	50	2	24	18	0	94
Alexandria City	46	2	30	13	2	93
Alleghany County	13	0	5	5	0	23
Amelia County	6	0	7	3	2	18
Amherst County	19	2	19	7	1	48
Appomattox County	10	1	3	2	0	16
Arlington County	65	1	42	12	5	125
Augusta County	48	2	36	15	3	104
Bath County	1	0	0	0	1	2
Bedford County	43	5	22	19	2	91
Bland County	1	0	3	0	0	4
Botetourt County	15	1	8	4	0	28
Bristol City	12	1	6	3	1	23
Brunswick County	22	1	4	3	1	31
Buchanan County	15	1	4	1	0	21
Buckingham County	10	1	4	4	0	19
Buena Vista City	4	0	5	0	0	9
Campbell County	20	2	18	7	2	49
Caroline County	26	3	13	8	0	50
Carroll County	17	1	19	9	0	46
Charles City County	4	0	4	3	0	11
Charlotte County	17	0	4	4	0	25
Charlottesville City	112	3	33	16	4	169
Chesapeake City	88	18	82	36	2	226
Chesterfield County	145	10	89	51	5	301
Clarke County	7	0	2	1	1	11
Colonial Heights City	3	3	5	2	1	14
Covington City	4	0	5	0	0	9
Craig County	2	1	2	3	0	8
Culpeper County	25	2	12	7	0	46
Cumberland County	6	0	1	0	1	8
Danville City	44	9	23	9	3	88
Dickenson County	8	1	6	7	0	22
Dinwiddie County	15	2	13	1	0	31
Emporia City	6	1	5	2	0	14
Essex County	14	0	5	2	0	21
Fairfax City	3	0	3	2	0	8
Fairfax County	364	33	180	103	14	695
Falls Church City	2	0	1	0	1	4
Fauquier County	31	3	15	12	0	61
Floyd County	8	1	7	2	0	18

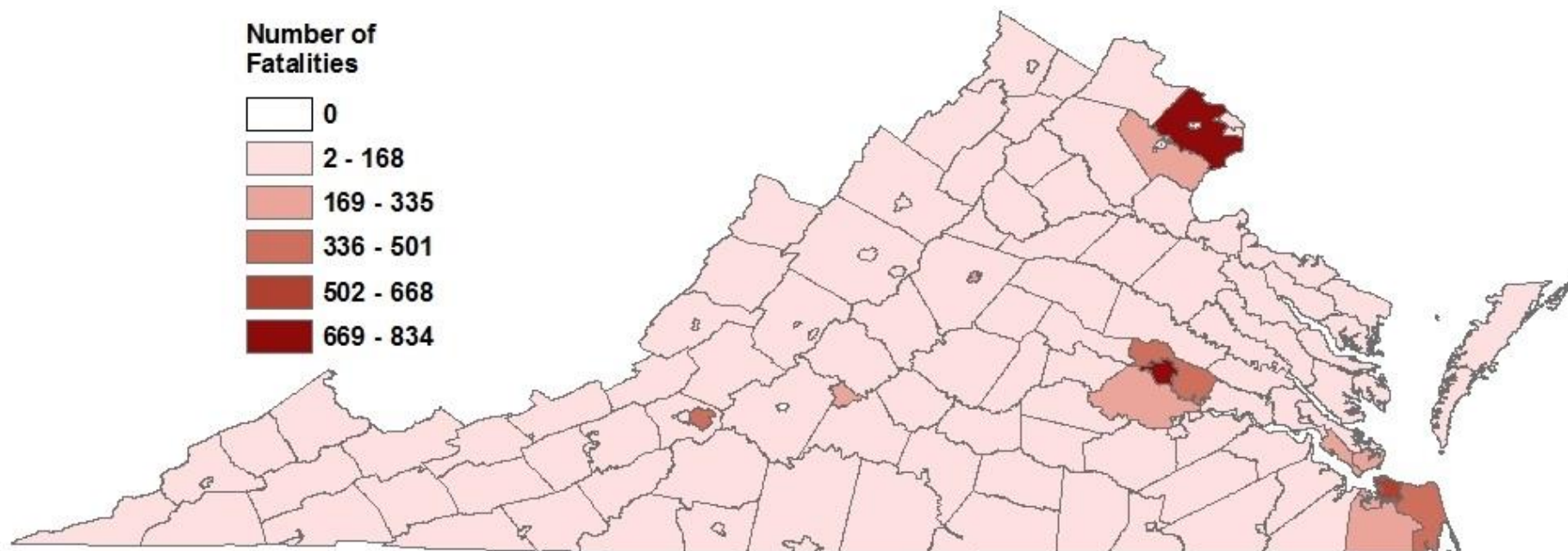
Locality of Death	Accident Total	Homicide Total	Natural Total	Suicide Total	Undet. Total	Total
Fluvanna County	7	0	4	2	0	13
Franklin City	2	2	11	2	0	17
Franklin County	33	5	7	8	0	53
Frederick County	30	1	10	12	1	54
Fredericksburg City	67	6	17	6	0	96
Galax City	2	0	7	4	1	14
Giles County	11	1	10	7	1	30
Gloucester County	26	0	14	5	3	48
Goochland County	8	1	4	6	0	19
Grayson County	7	0	8	3	0	18
Greene County	3	0	0	4	0	7
Greensville County	12	1	20	1	1	35
Halifax County	31	6	19	5	2	63
Hampton City	77	24	45	22	8	176
Hanover County	67	1	24	13	0	105
Harrisonburg City	16	2	8	9	0	35
Henrico County	215	17	68	40	12	352
Henry County	56	3	17	10	0	86
Highland County	1	0	1	0	0	2
Hopewell City	38	3	14	3	2	60
Isle of Wight County	11	0	5	8	1	25
James City County	22	3	19	12	1	57
King and Queen County	9	0	3	3	0	15
King George County	11	1	3	0	0	15
King William County	5	0	5	4	0	14
Lancaster County	7	0	6	2	0	15
Lee County	8	2	7	2	0	19
Lexington City	1	0	1	1	1	4
Loudoun County	68	3	42	32	4	149
Louisa County	26	1	9	1	1	39
Lunenburg County	7	0	9	3	0	19
Lynchburg City	118	8	34	6	5	171
Madison County	4	1	7	3	0	15
Manassas City	35	1	8	1	2	47
Manassas Park City	5	0	5	0	0	10
Martinsville City	26	3	10	2	3	44
Mathews County	5	0	5	3	1	14
Mecklenburg County	27	1	18	10	2	58
Middlesex County	8	0	3	3	1	15
Montgomery County	33	2	20	19	0	74
Nelson County	8	0	7	1	0	16
New Kent County	23	0	3	1	0	27

Locality of Death	Accident Total	Homicide Total	Natural Total	Suicide Total	Undet. Total	Total
Newport News City	168	42	62	29	11	313
Norfolk City	271	90	93	47	27	529
Northampton County	9	0	13	2	0	24
Northumberland County	8	0	6	2	0	16
Norton City	6	0	5	0	0	11
Nottoway County	3	0	6	1	0	11
Orange County	20	2	9	4	0	35
Page County	9	3	4	5	1	22
Patrick County	19	0	6	3	0	28
Petersburg City	63	19	35	4	3	126
Pittsylvania County	30	3	23	11	1	68
Poquoson City	1	0	2	2	0	5
Portsmouth City	112	21	50	8	2	193
Powhatan County	13	0	10	8	1	32
Prince Edward County	13	1	19	6	1	40
Prince George County	26	3	4	5	1	39
Prince William County	124	10	72	45	3	254
Pulaski County	33	3	16	8	0	60
Radford City	4	0	6	2	0	12
Rappahannock County	5	1	2	0	0	8
Richmond City	521	123	116	54	19	834
Richmond County	6	0	3	0	0	9
Roanoke City	319	26	73	34	5	457
Roanoke County	45	1	19	12	1	78
Rockbridge County	13	1	10	4	0	28
Rockingham County	37	3	17	14	1	72
Russell County	13	1	13	3	0	30
Salem City	29	0	11	6	2	48
Scott County	8	0	3	3	0	14
Shenandoah County	16	1	11	8	1	37
Smyth County	19	1	10	7	0	37
Southampton County	9	0	16	6	0	31
Spotsylvania County	59	7	29	14	1	111
Stafford County	46	3	24	16	0	90
Staunton City	10	0	15	4	0	29
Suffolk City	40	4	24	11	2	81
Surry County	1	0	5	2	0	8
Sussex County	9	0	9	0	1	19
Tazewell County	39	1	20	7	2	69
Virginia Beach City	201	12	111	70	11	405
Warren County	30	0	15	7	2	54
Washington County	33	2	23	13	1	72

Locality of Death	Accident Total	Homicide Total	Natural Total	Suicide Total	Undet. Total	Total
Waynesboro City	7	0	3	4	0	14
Westmoreland County	7	0	15	1	0	23
Williamsburg City	3	0	5	1	0	9
Winchester City	65	2	15	10	4	96
Wise County	25	3	16	6	1	52
Wythe County	22	0	13	6	0	41
York County	22	0	18	5	1	47
Subtotal (in-state)	5140	610	2421	1201	213	9599
Out of State	1	1	1	0	3	6
Unknown	0	0	0	0	0	0
Subtotal (out-of-state)	1	1	1	0	3	6
TOTAL	5141	611	2422	1201	216	9605

* Fatalities certified as 'undefined for fetal deaths' manner of death are omitted by counts and rates by locality because of small case counts, but are included in the summed total

Map 1.5 Number of OCME Cases by Locality of Death, 2021



SECTION 2: MANNERS OF DEATH

ACCIDENTAL DEATHS (N=5,141)

Accidents accounted for 53.5% of the deaths investigated by the OCME in 2021, which is the greatest proportion of deaths by any manner.

- The total number of accidental deaths increased 14.7% in 2021 compared to 2020
- For the fourth year in a row, fatal drug overdoses were the most common cause of accidental death (49.3%), followed by accidental motor vehicle deaths (21.0%)
- Seniors 85 years and older had the highest mortality rate due to falls (292.4 per 100,000 persons)
- Of the 3,620 (70.4%) decedents of accidental death that were tested for ethanol, 1,027 (28.4%) had ethanol detected through toxicology. Of those tested, 612 (16.9%) had a blood alcohol concentration of 0.08% or greater; the level of legal intoxication

Figure 2.1 Number and Rate of Accidental Deaths by Year of Death, 1999-2021

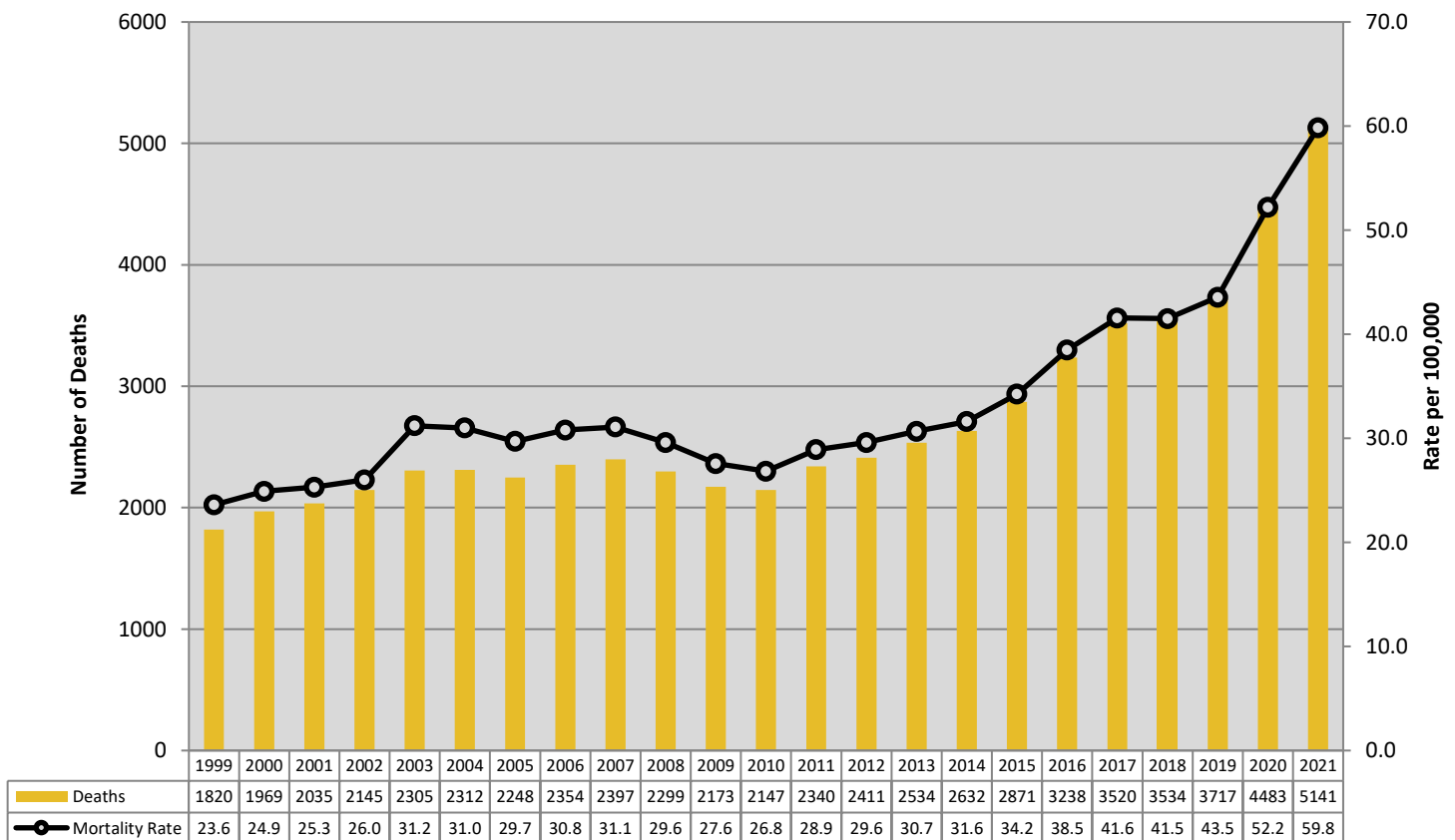
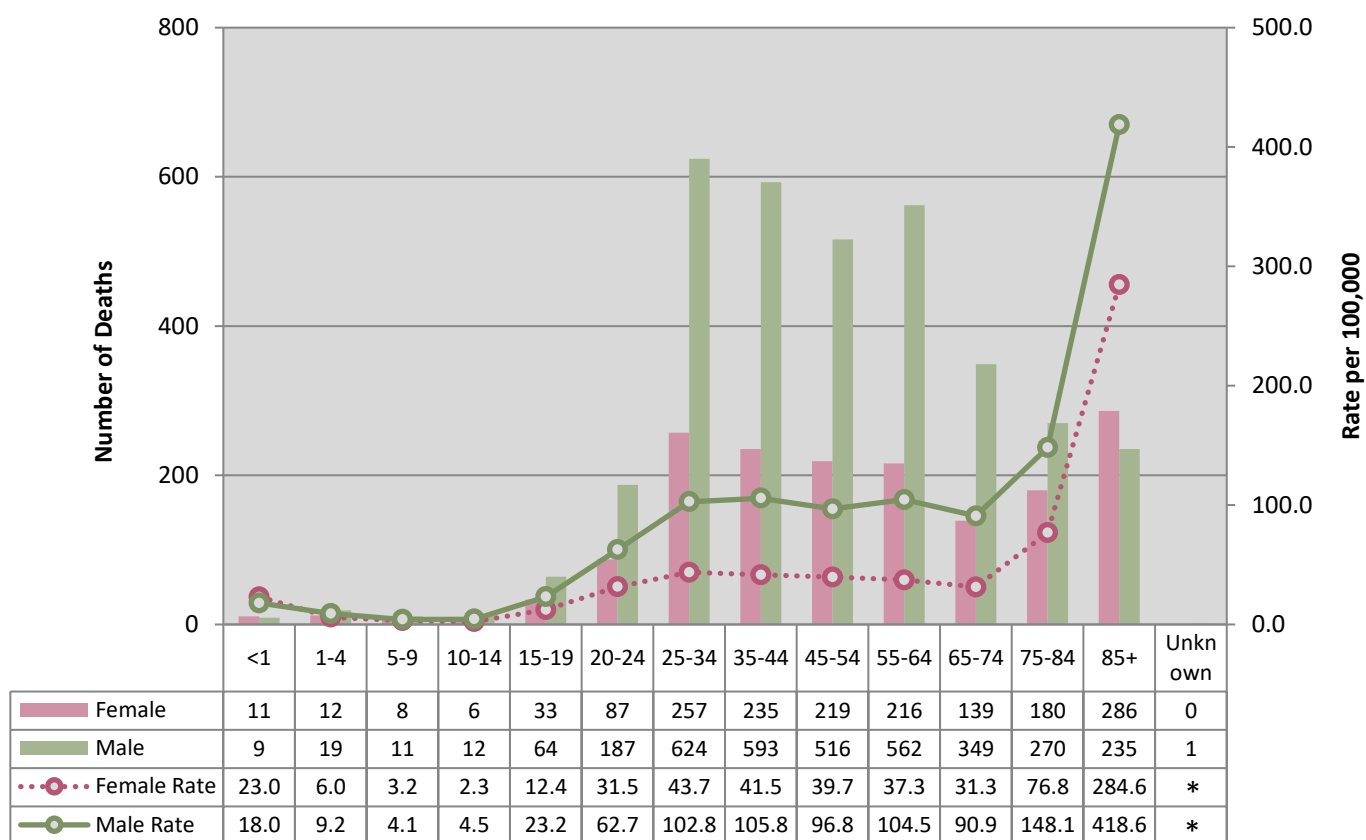


Figure 2.2 Number and Rate of Accidental Deaths by Age Group and Gender, 2021

* No rate can be calculated

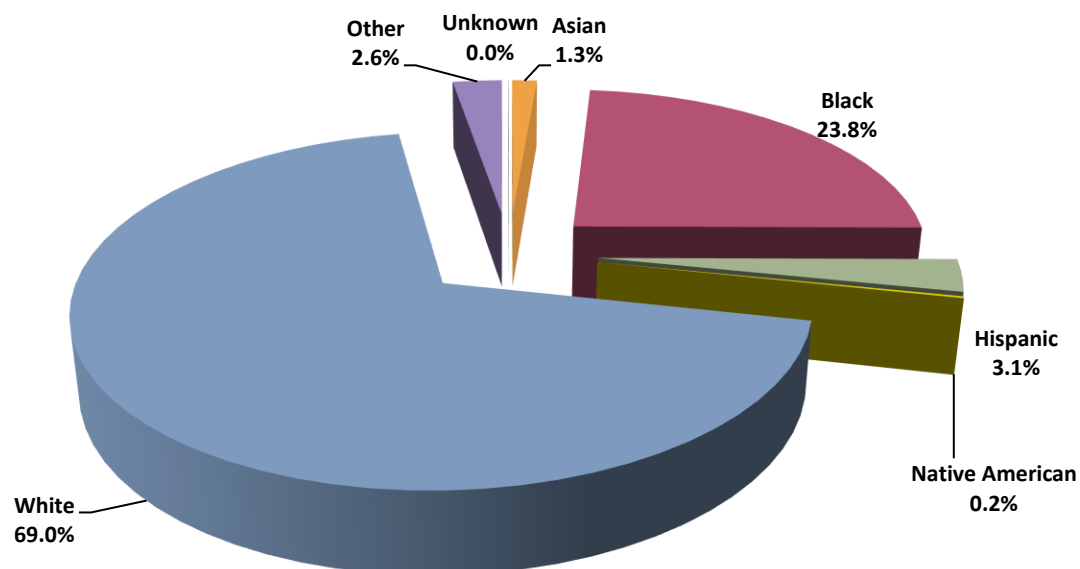
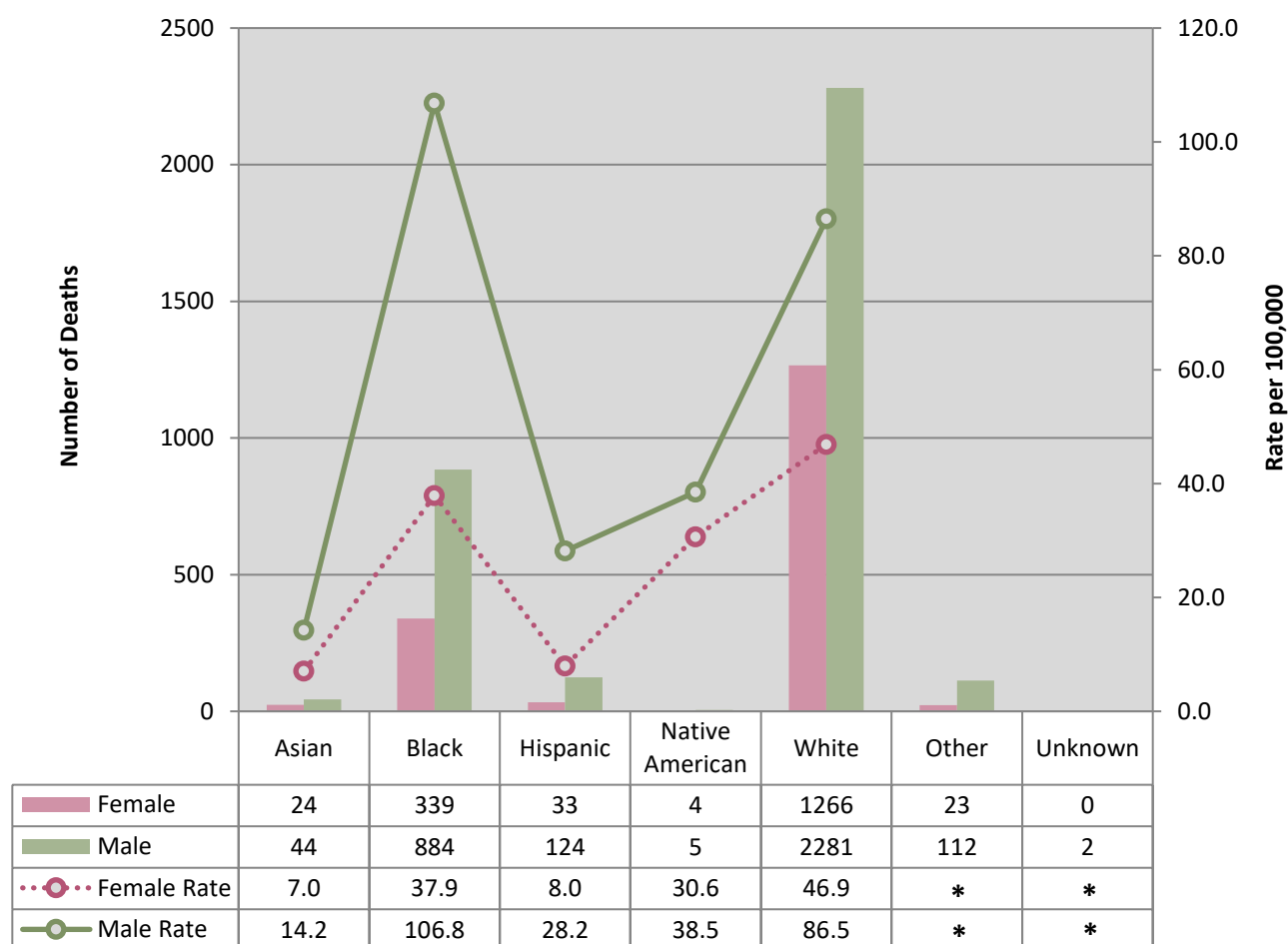
Figure 2.3 Percentage of Accidental Deaths by Race/Ethnicity, 2021

Figure 2.4 Number and Rate of Accidental Deaths by Race/Ethnicity and Gender, 2021

*No rate can be calculated

Note: Rates calculated from small sample sizes (<5 deaths) are considered unreliable and should be interpreted with caution (Native American females)

Table 2.1 Number of Accidental Death Cases by Cause and Method of Death, 2021

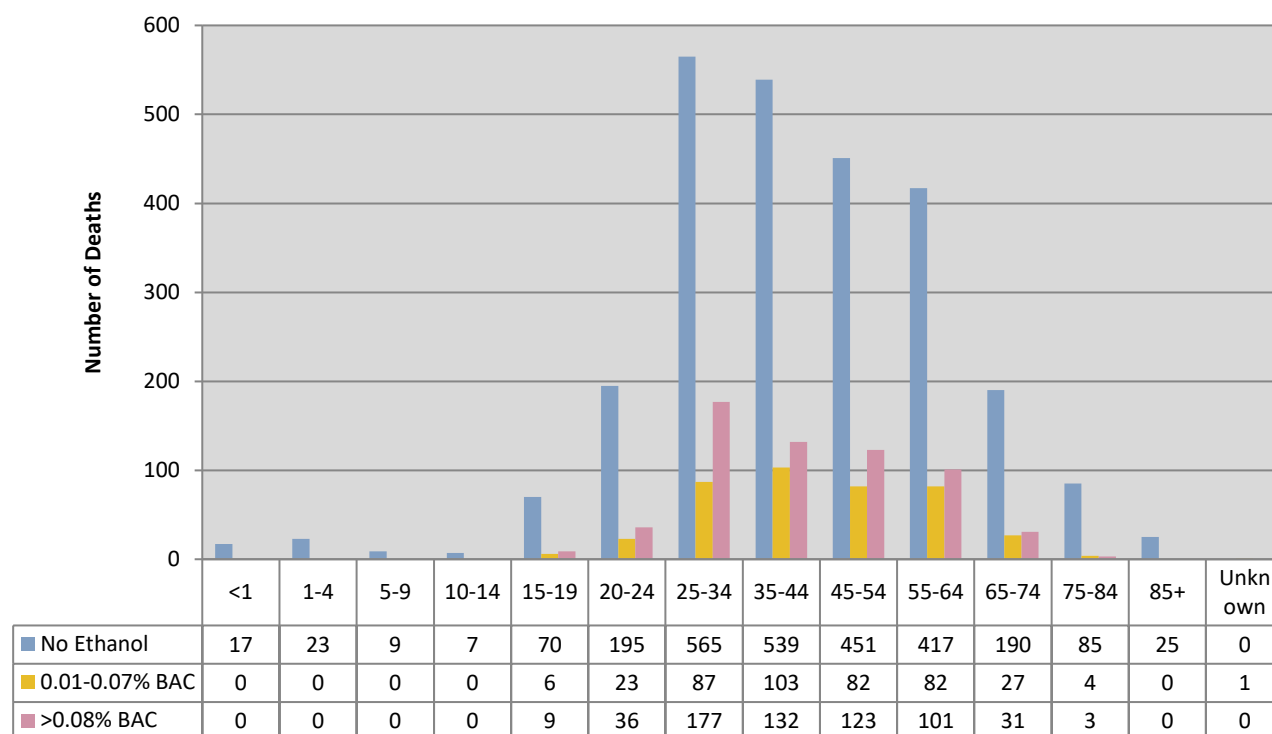
Method of Death	Autopsied	Total Cases
Animal/Insect		
Bit, stung, or kicked by an animal/insect	0	4
Asphyxia		
Carbon Monoxide poisoning (motor vehicle exhaust)	2	5
Carbon Monoxide poisoning (other)	2	4
Choked on food/foreign object	3	64
Drowned	81	104
Hanged	1	3
Oxygen depletion/replacement	2	2
Mechanical/Positional asphyxia	13	30
Strangled/neck compression	1	2
Suffocated/Smothered	10	10
Other asphyxia	1	1
Drug Poisoning		
Ingested and/or injected ethanol, illicit, prescription, and/or other type of drug	821	2533
Electrical		
Contacted electrical current	3	3
Exposure		
Exposed to cold	22	36
Exposed to heat	6	7
Fall/Jump		
Fell/Jumped from any height	41	1061
Fire		
Thermal burns and/or inhalation of combustion products	34	90
Motor Vehicle Collision		
Aircraft	1	1
All Terrain Vehicle	1	18
Bicycle	3	23
Boat	0	2
Bus	0	3
Car	66	464
Construction Heavy Equipment	3	5
Dump Truck	0	1
Farm Equipment	0	9
Horse Drawn Buggy	0	1
Lawnmower	0	2
Mo-Ped	2	17
Motorcycle	6	111

Multiple	1	3
Pickup Truck	9	102
Scooter	0	1
Sport Utility Vehicle	21	178
Tractor Trailer	0	17
Train	1	7
Truck Other	5	18
Van	1	37
Unknown	11	59
Traumatic Injury		
Accidental discharge of firearm		
Handgun	7	7
Shotgun	1	1
Unknown	1	1
Explosion	0	2
Hit/Crushed by falling object	6	27
Sharp force injury	0	3
Other/Undetermined		
Other	16	62
TOTAL ACCIDENTAL DEATHS	1205	5141

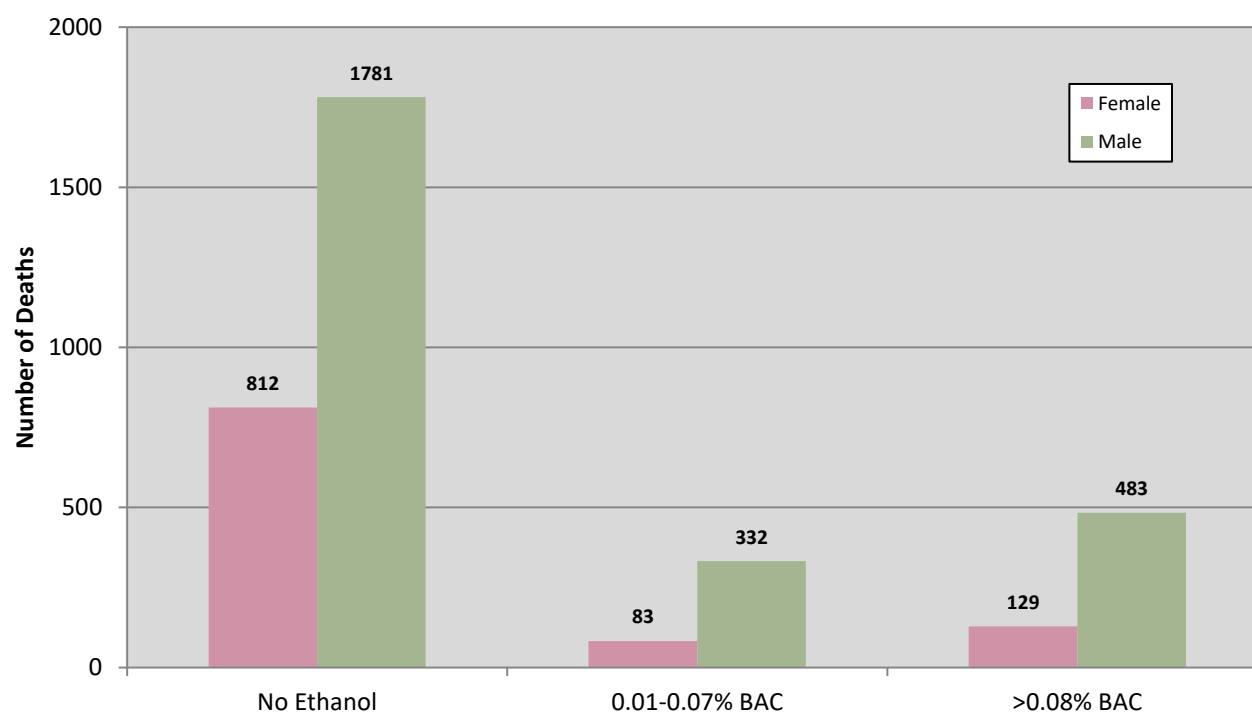
Table 2.2 Number and Rate of the Top Five Accidental Methods of Death by Age Group, 2021

Method of Death											
Age Group	Drowning		Drug Use		Fall		Fire/Smoke Inhalation		Motor Vehicle Collision		TOTAL
	Count	Rate	Count	Rate	Count	Rate	Count	Rate	Count	Rate	
<1	0	0.0	0	0.0	0	0.0	2	2.0	3	3.1	5
1-4	11	2.7	2	0.5	0	0.0	5	1.2	7	1.7	25
5-9	2	0.4	0	0.0	0	0.0	4	0.8	12	2.3	18
10-14	1	0.2	2	0.4	0	0.0	1	0.2	13	2.5	17
15-19	3	0.6	32	5.9	0	0.0	1	0.2	57	10.5	93
20-24	4	0.7	166	28.9	5	0.9	6	1.0	93	16.2	274
25-34	16	1.3	632	52.9	8	0.7	5	0.4	198	16.6	859
35-44	13	1.2	641	56.9	15	1.3	7	0.6	136	12.1	812
45-54	7	0.6	525	48.4	31	2.9	14	1.3	129	11.9	706
55-64	15	1.3	427	38.2	95	8.5	20	1.8	166	14.9	723
65-74	19	2.3	98	11.8	166	20.1	17	2.1	135	16.3	435
75-84	9	2.2	6	1.4	283	67.9	8	1.9	97	23.3	403
85+	3	1.9	2	1.3	458	292.4	0	0.0	33	21.1	496
Unknown	1	ND	0	ND	0	ND	0	ND	0	ND	1
TOTAL	104	1.2	2533	29.5	1061	12.4	90	1.0	1079	12.6	4270

Note: Highlighted pink cells indicate the highest rate among the method of death within the corresponding age group; rates are per 100,000; ND represents no denominator

Figure 2.5 Number of Accidental Deaths by Age Group and Ethanol Level (N=3,620), 2021

Note: Of the 5,141 accidental deaths, 29.6% (n=1,521) did not receive toxicology testing

Figure 2.6 Number of Accidental Deaths by Ethanol Level and Gender (N=3,620), 2021

Note: Of the 5,141 accidental deaths, 29.6% (n=1,521) did not receive toxicology testing

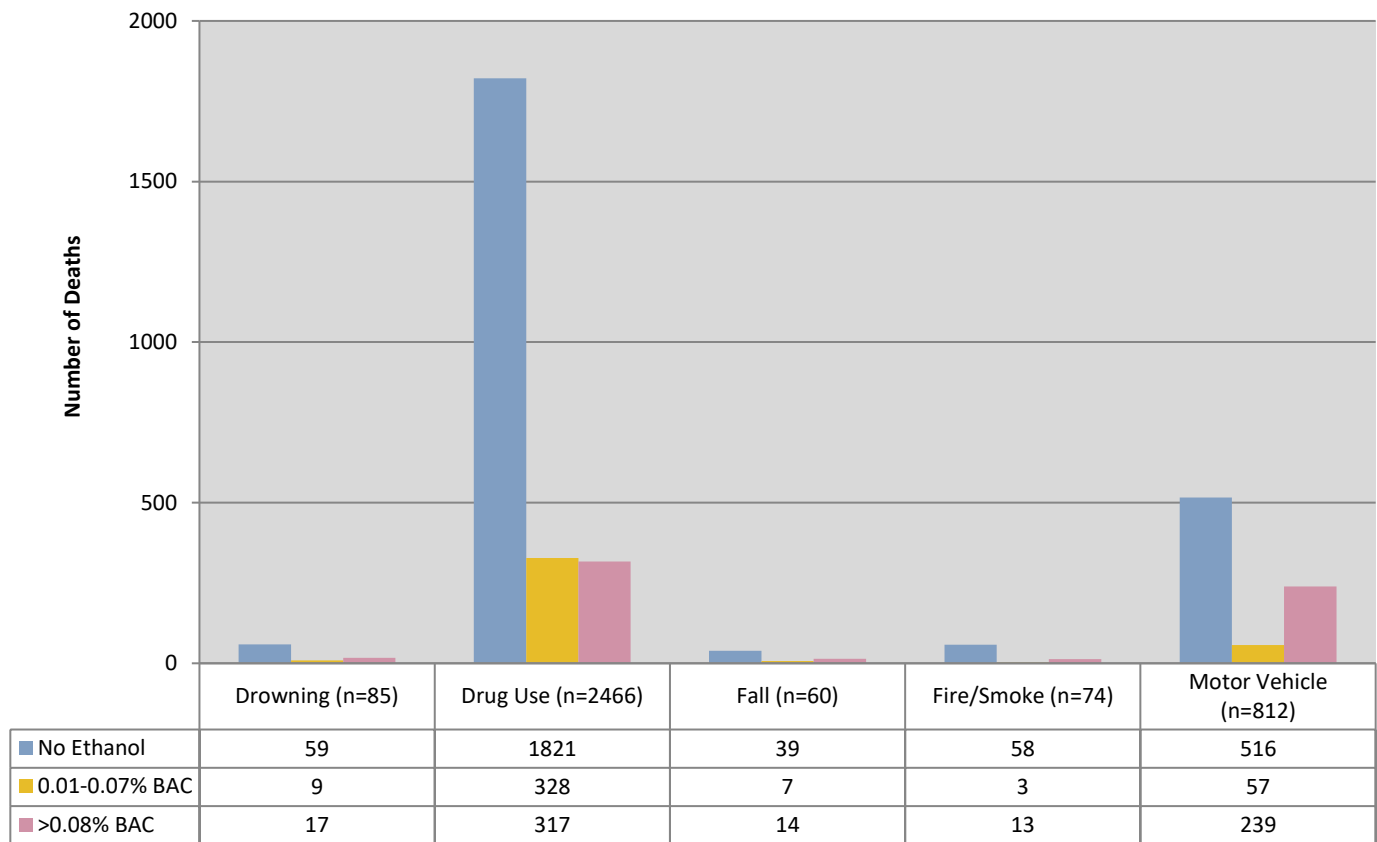
Figure 2.7 Number of the Top 5 Accidental Methods of Death by Ethanol Level, 2021

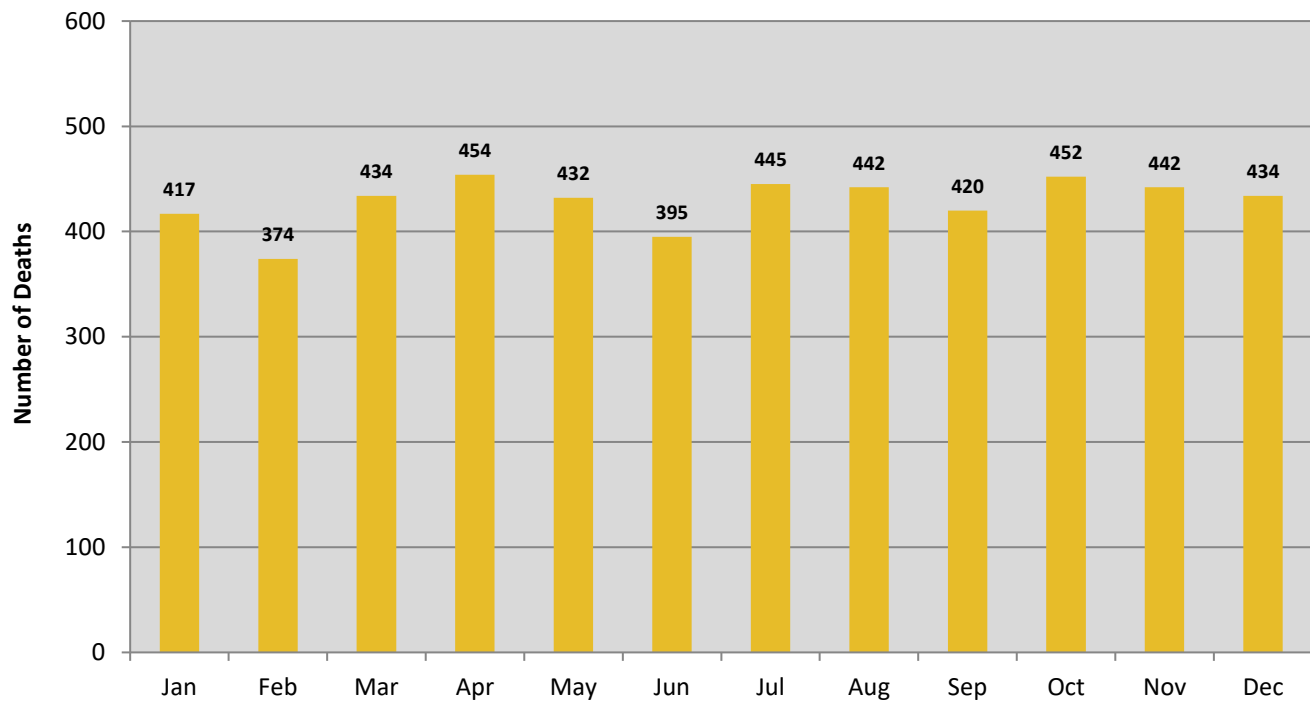
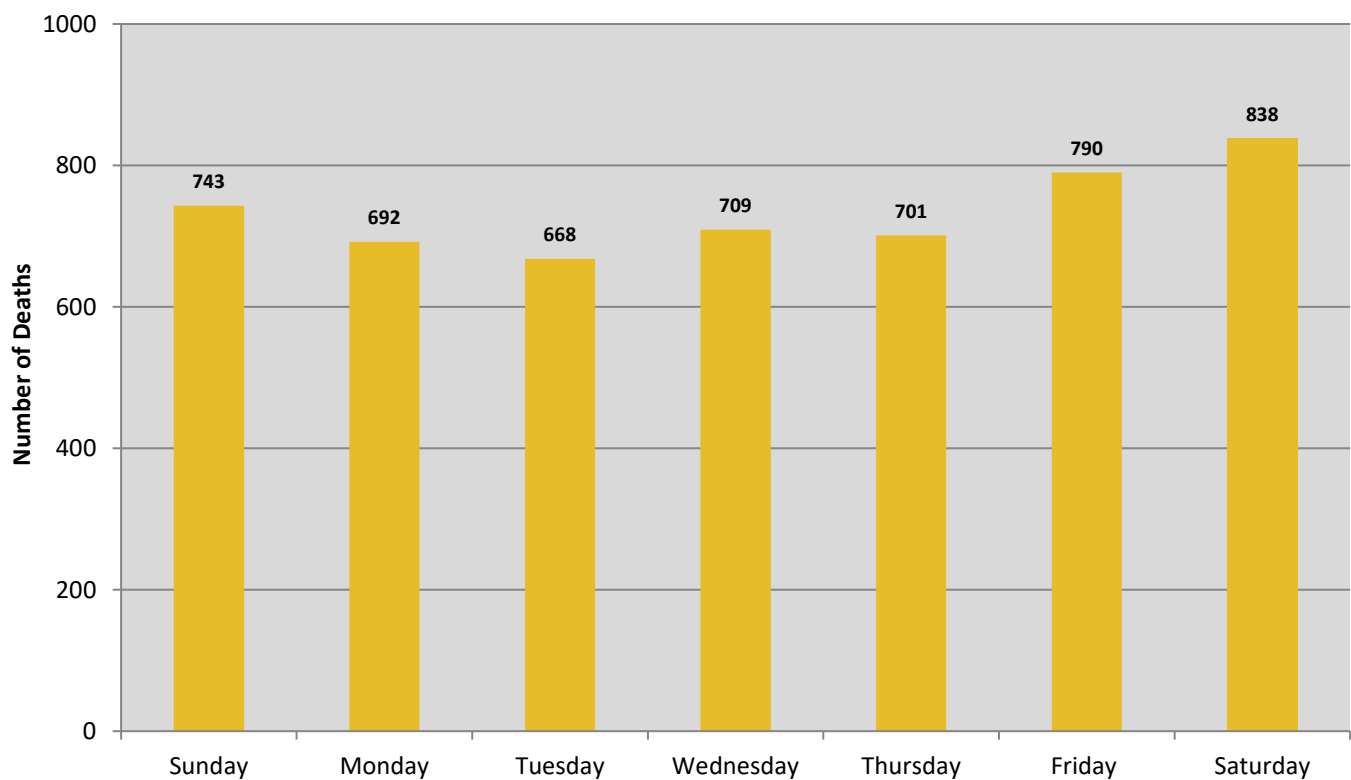
Figure 2.8 Number of Accidental Deaths by Month of Death, 2021**Figure 2.9 Number of Accidental Deaths by Day of Death, 2021**

Table 2.3 Number of Accidental Deaths by Locality of Injury and Year of Death, 2006-2021

Locality of Injury	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	TOTAL
Accomack County	22	20	11	19	18	16	15	12	15	10	16	13	17	11	17	21	253
Albemarle County	17	20	33	25	28	34	28	32	44	40	35	51	41	56	63	58	605
Alexandria City	21	21	21	22	14	22	16	21	21	31	25	34	16	35	23	42	385
Alleghany County	10	14	8	5	6	4	7	8	10	7	13	8	6	6	10	20	142
Amelia County	4	7	11	9	4	8	9	5	7	6	9	10	9	9	14	7	128
Amherst County	11	8	16	9	5	18	19	12	12	9	17	12	17	18	22	30	235
Appomattox County	2	6	7	4	3	5	4	4	8	4	8	3	7	9	10	12	96
Arlington County	18	19	30	34	27	24	34	32	31	34	30	35	35	26	49	58	516
Augusta County	26	34	38	33	30	27	33	32	29	23	36	37	36	43	39	52	548
Bath County	2	3	1	4	3	3	6	2	1	1	3	2	3	5	4	3	46
Bedford City	3	5	5	4	4	2	0	2	*	*	*	*	*	*	*	*	25
Bedford County	22	27	16	30	31	24	40	32	24	31	38	45	42	40	51	62	555
Bland County	0	6	2	7	4	7	2	2	3	3	2	4	1	1	9	3	56
Botetourt County	12	12	13	11	11	19	15	12	14	20	15	20	18	14	18	28	252
Bristol City	6	10	3	3	7	5	7	1	6	2	1	3	5	4	3	12	78
Brunswick County	16	7	6	8	13	8	14	15	11	12	11	8	13	19	19	25	205
Buchanan County	21	18	19	11	23	18	20	13	15	15	9	18	17	13	4	14	248
Buckingham County	3	9	6	3	5	5	7	5	15	3	12	12	8	12	13	12	130
Buena Vista City	0	0	1	2	0	1	2	0	1	2	0	3	1	2	1	4	20
Campbell County	32	16	31	12	17	14	25	21	20	23	24	27	27	25	28	38	380
Caroline County	9	14	8	9	13	14	10	17	7	19	29	13	29	21	26	33	271
Carroll County	17	15	19	11	7	13	14	15	19	14	10	13	8	10	18	19	222
Charles City County	4	8	7	7	7	6	5	3	5	4	8	1	3	8	6	6	88
Charlotte County	4	6	6	5	6	9	5	6	4	7	9	4	7	9	8	18	113
Charlottesville City	21	28	11	16	12	9	8	11	13	18	19	12	27	23	29	34	291
Chesapeake City	55	60	48	53	43	58	57	67	59	86	101	81	79	80	96	99	1122
Chesterfield County	56	68	92	68	70	74	82	78	89	96	124	141	144	143	174	204	1703
Clarke County	5	6	5	8	10	4	8	5	8	6	17	9	15	13	9	12	140
Colonial Heights City	6	3	4	2	2	3	3	5	6	3	15	5	9	8	4	10	88
Covington City	4	0	2	2	0	1	0	1	3	1	3	4	3	1	4	4	33
Craig County	7	2	2	4	2	2	1	4	3	2	3	2	3	2	3	3	45

Locality of Injury	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	TOTAL
Culpeper County	16	24	12	12	14	14	19	23	27	19	24	34	30	26	33	32	359
Cumberland County	1	2	4	3	2	3	4	9	2	6	3	6	4	4	7	8	68
Danville City	16	13	22	20	20	19	16	20	20	17	22	18	18	26	32	41	340
Dickenson County	11	16	13	5	11	13	10	8	10	11	14	6	8	10	8	8	162
Dinwiddie County	12	14	20	12	10	8	9	15	6	12	18	18	12	25	14	27	232
Emporia City	2	8	2	1	3	3	3	4	1	2	3	1	4	5	3	5	50
Essex County	4	7	4	7	5	8	3	2	5	5	7	8	4	5	6	13	93
Fairfax City	3	4	5	11	5	7	11	11	11	6	10	9	12	9	3	10	127
Fairfax County	221	156	144	148	152	195	184	196	210	243	253	226	246	250	256	300	3380
Falls Church City	2	1	0	2	1	6	0	2	4	0	1	2	1	2	1	3	28
Fauquier County	21	31	26	33	32	33	27	30	28	50	53	30	54	32	35	36	551
Floyd County	13	10	5	8	5	10	5	10	8	10	8	7	12	12	10	15	148
Fluvanna County	9	7	14	7	6	5	7	5	6	12	3	9	13	7	15	9	134
Franklin City	2	2	1	1	2	0	1	2	3	4	3	6	3	1	5	2	38
Franklin County	27	22	23	26	21	33	38	17	23	19	42	37	42	34	45	54	503
Frederick County	24	24	26	31	27	29	25	36	36	40	40	47	38	41	53	44	561
Fredericksburg City	22	14	15	6	11	12	21	14	8	22	24	29	23	15	31	33	300
Galax City	0	3	0	0	0	3	4	2	2	2	1	2	0	4	5	2	30
Giles County	9	5	9	9	10	3	10	12	14	10	12	12	7	4	15	15	156
Gloucester County	21	10	16	10	20	15	12	16	13	11	24	25	20	12	24	27	276
Goochland County	6	15	10	14	8	8	13	5	6	12	5	9	13	12	7	14	157
Grayson County	13	5	2	6	5	5	6	7	5	5	8	2	4	8	5	9	95
Greene County	4	14	5	4	7	2	9	5	7	5	4	9	8	9	14	7	113
Greensville County	10	3	2	5	6	2	5	3	9	5	7	8	3	7	12	15	102
Halifax County	15	22	27	14	20	16	9	9	23	15	20	12	19	16	18	34	289
Hampton City	31	27	28	25	35	38	24	38	29	35	58	50	65	89	84	84	740
Hanover County	21	27	26	13	18	29	26	36	42	32	30	46	48	53	66	66	579
Harrisonburg City	11	1	3	5	4	8	6	10	10	9	13	13	14	17	18	25	167
Henrico County	89	65	77	73	70	58	72	95	88	109	120	136	131	157	152	232	1724
Henry County	34	15	34	22	26	31	31	23	28	24	30	32	31	40	55	75	531
Highland County	1	2	2	2	2	1	0	1	2	2	1	0	5	2	0	2	25

Locality of Injury	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	TOTAL
Hopewell City	5	7	6	7	7	6	6	3	7	7	12	14	16	13	20	37	173
Isle of Wight County	16	16	14	12	13	7	11	11	15	11	15	16	13	16	18	22	226
James City County	17	9	24	16	13	19	11	27	16	27	26	29	34	24	43	38	373
King and Queen County	5	7	5	8	2	1	3	4	4	4	3	6	6	6	9	15	88
King George County	5	7	8	10	2	8	10	13	16	8	13	23	14	8	12	14	171
King William County	3	6	5	9	2	6	6	8	5	7	12	7	8	2	13	7	106
Lancaster County	9	9	6	2	2	8	2	6	2	5	11	7	12	7	6	10	104
Lee County	11	16	10	13	8	15	11	11	7	6	10	7	13	9	14	8	169
Lexington City	3	2	1	2	4	1	2	2	1	2	1	7	1	5	6	5	45
Loudoun County	23	36	27	29	32	36	52	54	64	50	69	90	63	61	74	70	830
Louisa County	16	24	17	21	14	11	13	17	7	11	28	13	23	24	21	33	293
Lunenburg County	6	11	9	5	2	1	6	7	5	5	4	8	5	10	9	10	103
Lynchburg City	13	24	24	16	25	21	34	25	26	28	26	28	41	59	57	74	521
Madison County	3	9	6	3	5	4	6	5	5	7	3	12	9	8	11	6	102
Manassas	8	8	5	11	4	6	15	3	9	11	7	22	11	14	19	21	174
Manassas Park	Unknown	1	1	2	3	4	1	1	5	1	1	6	3	2	5	11	47
Martinsville City	8	3	8	6	7	7	6	10	8	8	4	9	16	12	20	18	150
Mathews County	8	4	1	4	2	2	3	6	3	6	4	3	1	5	8	7	67
Mecklenburg County	18	17	11	16	10	13	13	15	16	15	18	26	25	20	19	32	284
Middlesex County	3	7	6	6	6	1	4	4	6	7	8	8	7	10	12	12	107
Montgomery County	15	24	27	24	30	28	23	26	23	21	28	37	32	34	42	37	451
Nelson County	6	11	6	11	6	9	9	9	11	9	8	12	14	10	13	15	159
New Kent County	15	7	7	8	12	11	9	6	11	15	9	6	9	14	11	29	179
Newport News City	52	35	36	53	40	45	33	43	54	64	75	68	91	89	127	125	1030
Norfolk City	59	79	59	67	49	73	71	89	68	86	126	119	115	125	163	185	1533
Northampton County	6	7	10	9	5	3	2	5	12	4	15	8	9	6	9	13	123
Northumberland County	2	3	8	4	6	9	8	7	7	6	3	5	8	8	11	10	105
Norton City	3	0	1	1	2	0	1	2	0	1	1	0	1	1	2	3	19
Nottoway County	6	7	3	14	6	7	5	7	8	9	9	6	4	20	12	8	131
Orange County	6	14	13	10	14	16	9	19	25	16	27	27	20	29	25	26	296

Locality of Injury	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	TOTAL
Page County	4	10	4	7	8	14	12	10	7	6	13	8	18	16	13	16	166
Patrick County	5	7	11	8	8	5	9	12	8	10	6	8	14	8	16	23	158
Petersburg City	16	22	14	14	13	3	11	10	12	8	25	25	21	24	47	50	315
Pittsylvania County	28	30	37	29	25	27	34	22	30	33	21	35	45	39	49	41	525
Poquoson City	5	1	1	3	1	2	0	2	1	4	3	5	1	4	7	6	46
Portsmouth City	29	20	18	29	23	28	19	33	30	45	52	59	70	57	72	124	708
Powhatan County	14	6	7	5	3	7	12	12	9	7	3	15	8	11	13	19	151
Prince Edward County	9	14	5	14	11	4	9	10	5	13	14	11	7	15	14	16	171
Prince George County	9	12	12	10	11	11	11	13	13	16	7	22	12	19	13	35	226
Prince William County	69	56	65	63	72	78	92	79	88	65	108	117	103	99	144	144	1442
Pulaski County	16	23	19	15	19	19	14	18	25	18	21	21	23	30	29	35	345
Radford City	2	5	9	3	8	3	8	2	6	4	4	7	1	8	7	7	84
Rappahannock County	0	4	2	3	6	4	5	4	2	1	1	6	0	7	12	7	64
Richmond City	127	133	85	68	67	87	77	79	89	105	146	167	144	171	273	323	2141
Richmond County	2	3	6	2	4	4	5	3	5	2	6	8	2	10	3	8	73
Roanoke City	37	30	32	41	36	39	40	57	49	54	48	88	85	75	153	145	1009
Roanoke County	27	22	23	19	17	26	27	28	36	41	44	54	56	49	70	73	612
Rockbridge County	12	14	10	13	7	10	14	7	13	16	13	12	16	20	10	16	203
Rockingham County	30	21	19	16	18	16	25	22	37	37	25	27	34	40	43	40	450
Russell County	19	19	15	11	16	20	14	12	9	14	16	11	4	12	19	13	224
Salem City	13	7	8	8	8	4	12	12	12	8	10	13	15	22	21	17	190
Scott County	6	8	11	9	5	8	9	10	7	6	9	9	5	9	12	7	130
Shenandoah County	14	5	24	13	12	15	17	15	23	32	20	19	16	26	23	24	298
Smyth County	13	10	11	7	12	10	9	12	10	14	11	10	11	9	18	25	192
Southampton County	10	15	10	10	11	6	8	17	9	11	7	10	14	13	6	14	171
Spotsylvania County	29	39	31	29	43	36	34	39	38	53	67	51	71	87	83	84	814
Stafford County	18	44	25	24	21	23	33	33	26	48	45	35	46	53	61	60	595
Staunton City	7	6	8	7	5	8	3	4	10	7	5	13	7	12	15	13	130
Suffolk City	16	37	26	17	30	25	25	30	27	34	25	38	30	31	48	47	486
Surry County	2	7	4	1	6	2	1	4	2	3	3	3	0	5	6	1	50
Sussex County	13	15	17	11	12	5	2	3	8	6	16	23	9	17	15	11	183

Locality of Injury	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	TOTAL
Tazewell County	36	11	16	19	25	30	23	14	20	17	14	20	20	30	35	48	378
Virginia Beach City	101	106	102	110	77	112	111	119	116	126	130	184	149	149	202	208	2102
Warren County	6	12	17	9	25	23	15	20	20	20	21	35	20	27	33	33	336
Washington County	18	20	22	14	21	28	16	10	21	23	14	17	19	16	19	30	308
Waynesboro City	7	2	7	6	7	3	13	8	5	10	7	10	6	13	9	13	126
Westmoreland County	13	9	11	6	11	10	7	7	5	13	15	12	9	13	19	9	169
Williamsburg City	6	5	3	6	2	9	5	6	6	1	7	9	4	6	13	6	94
Winchester City	15	2	4	10	7	7	16	17	19	19	14	18	17	19	23	16	223
Wise County	31	28	15	22	22	23	19	23	14	17	19	25	22	18	14	28	340
Wythe County	11	14	24	12	13	9	17	14	21	25	18	19	8	13	24	24	266
York County	14	17	14	7	15	17	8	16	18	16	18	21	29	22	27	23	282
Subtotal (in-state)	2316	2322	2227	2104	2079	2272	2332	2454	2546	2751	3150	3408	3353	3575	4350	4973	46212
Out of State	29	51	46	52	54	54	59	62	61	81	65	77	73	98	73	107	1042
Unknown	8	24	26	17	14	14	20	18	25	39	23	35	108	44	60	61	536
Subtotal (out-of-state)	37	75	72	69	68	68	79	80	86	120	88	112	181	142	133	168	1578
TOTAL	2353	2397	2299	2173	2147	2340	2411	2534	2632	2871	3238	3520	3534	3717	4483	5141	47790

* Bedford City was incorporated into Bedford County in 2014 and therefore numbers are combined from there forward

HOMICIDE DEATHS (N=611)

The number of homicides in 2021 increased 11.3% compared to 2020. As previous years have shown, homicides most frequently occurred among males (80.5%) and among Blacks (67.8%). Males aged 20-24 years demonstrate the highest homicide rate with 27.5 deaths per 100,000 persons.

- Over 83% of all homicides in 2021 were due to a firearm. Over 62% of all homicides were specifically due to a handgun
- Of the 95.4% of homicide victims tested for ethanol, 28.5% had ethanol present. Furthermore, 17.5% of those tested had a blood alcohol concentration of 0.08% or greater
- Richmond City had both the largest number of homicides by locality of residence and locality of injury (n=69 and n=106, respectively). Petersburg had both the highest homicide rate by locality of residence and by location of injury (46.0 and 65.7 per 100,000, respectively)

Figure 2.10 Number and Rate of Homicide Deaths by Year of Death, 1999-2021

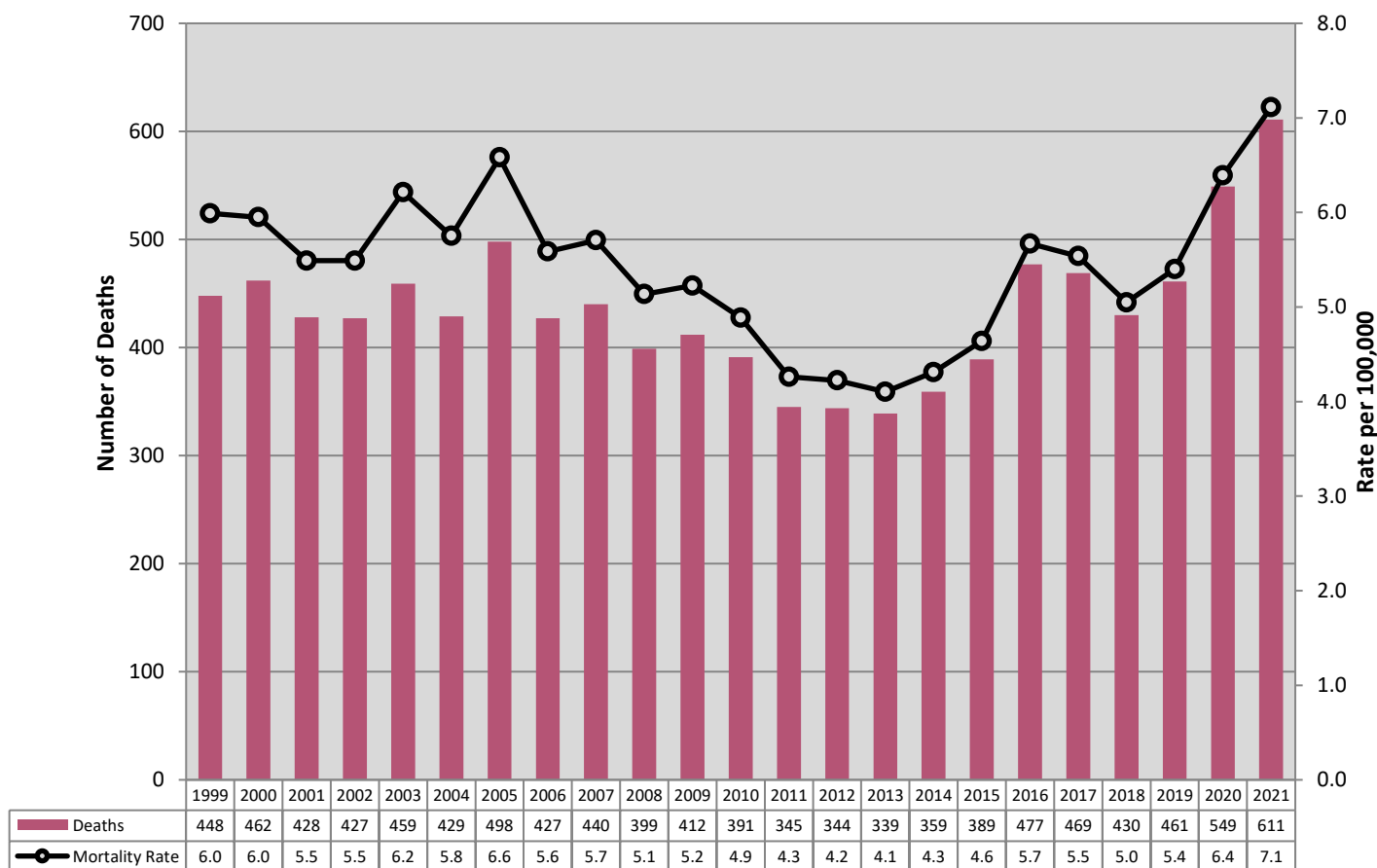


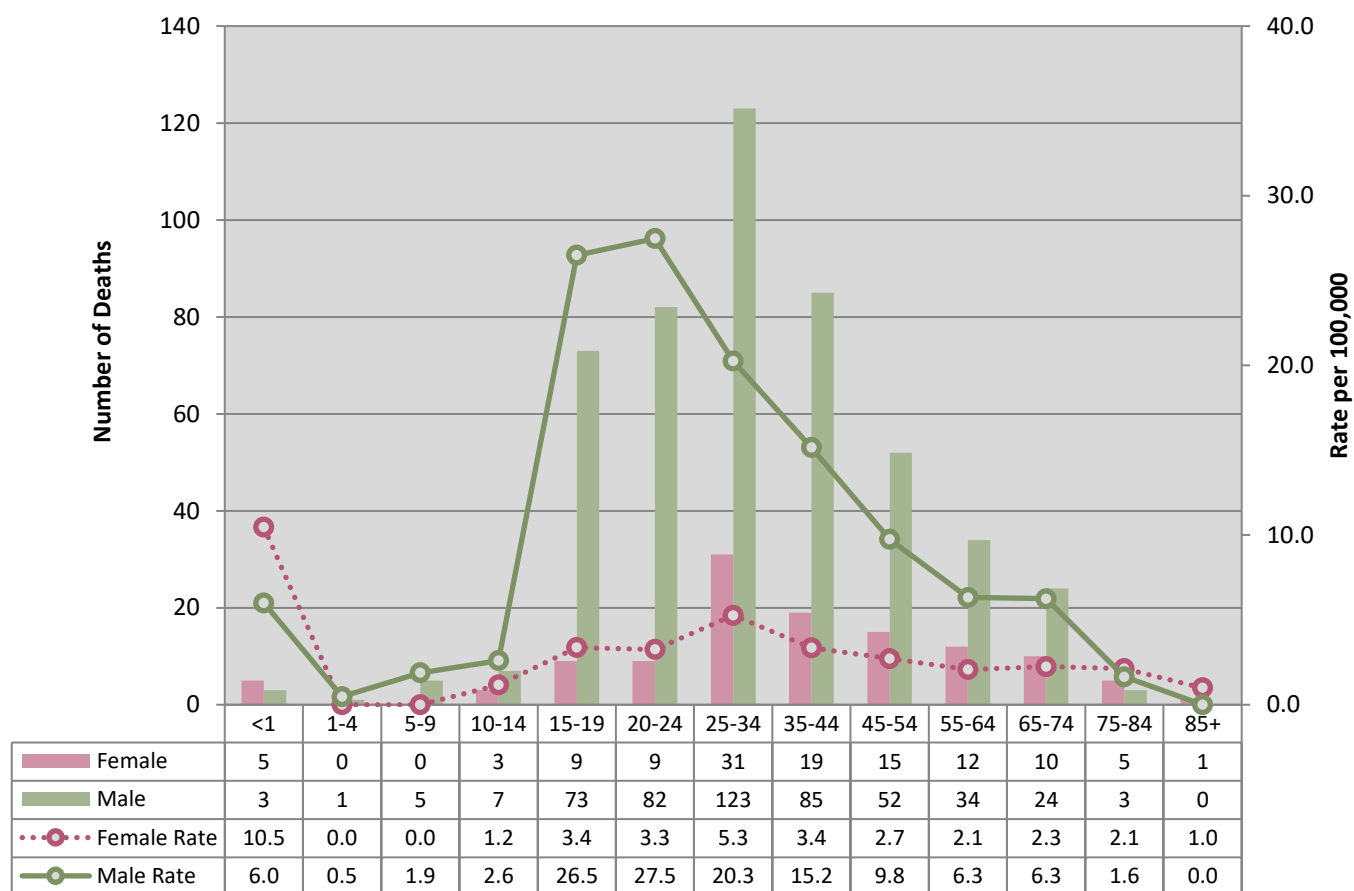
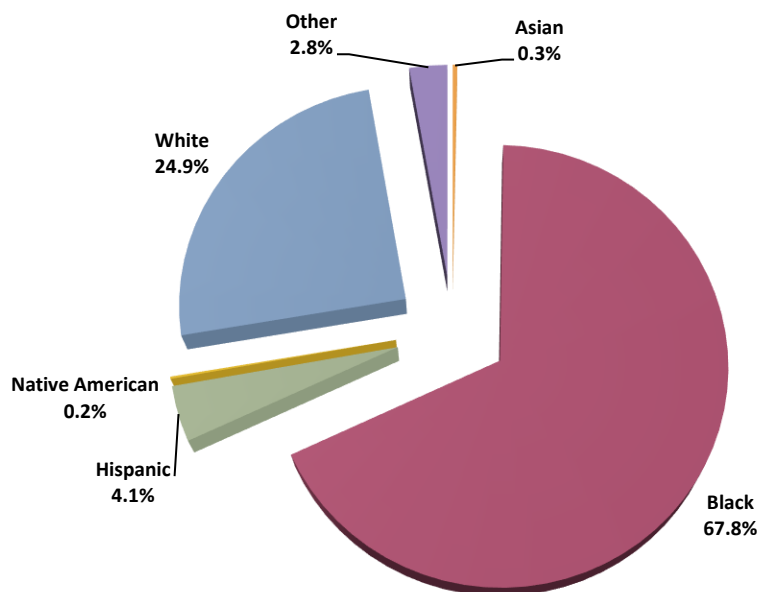
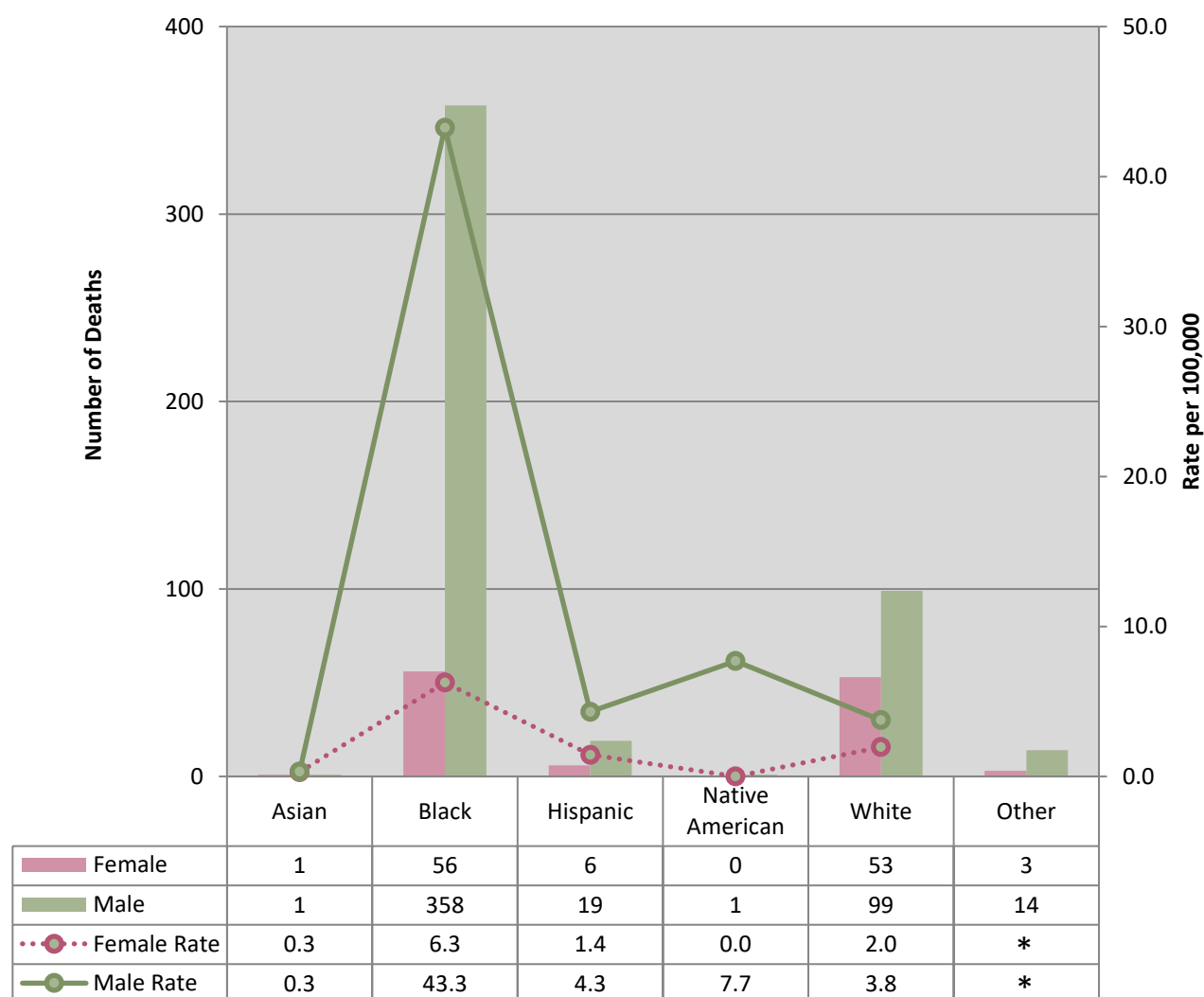
Figure 2.11 Number and Rate of Homicide Deaths by Age Group and Gender, 2021**Figure 2.12 Percentage of Homicide Deaths by Race/Ethnicity, 2021**

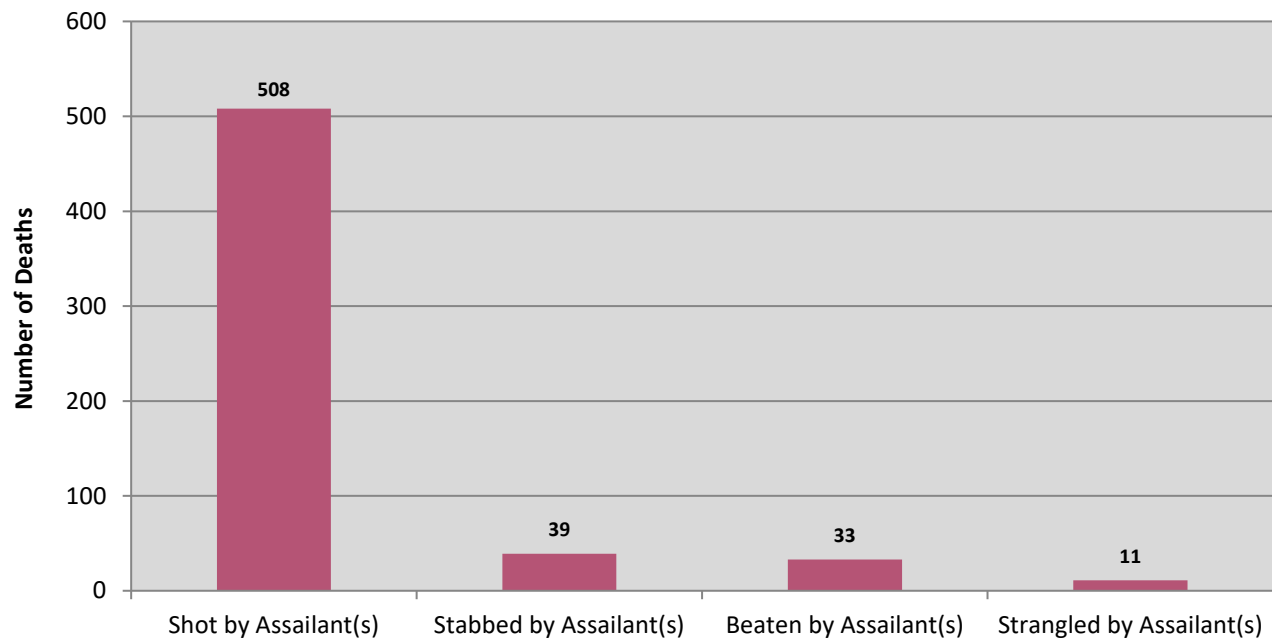
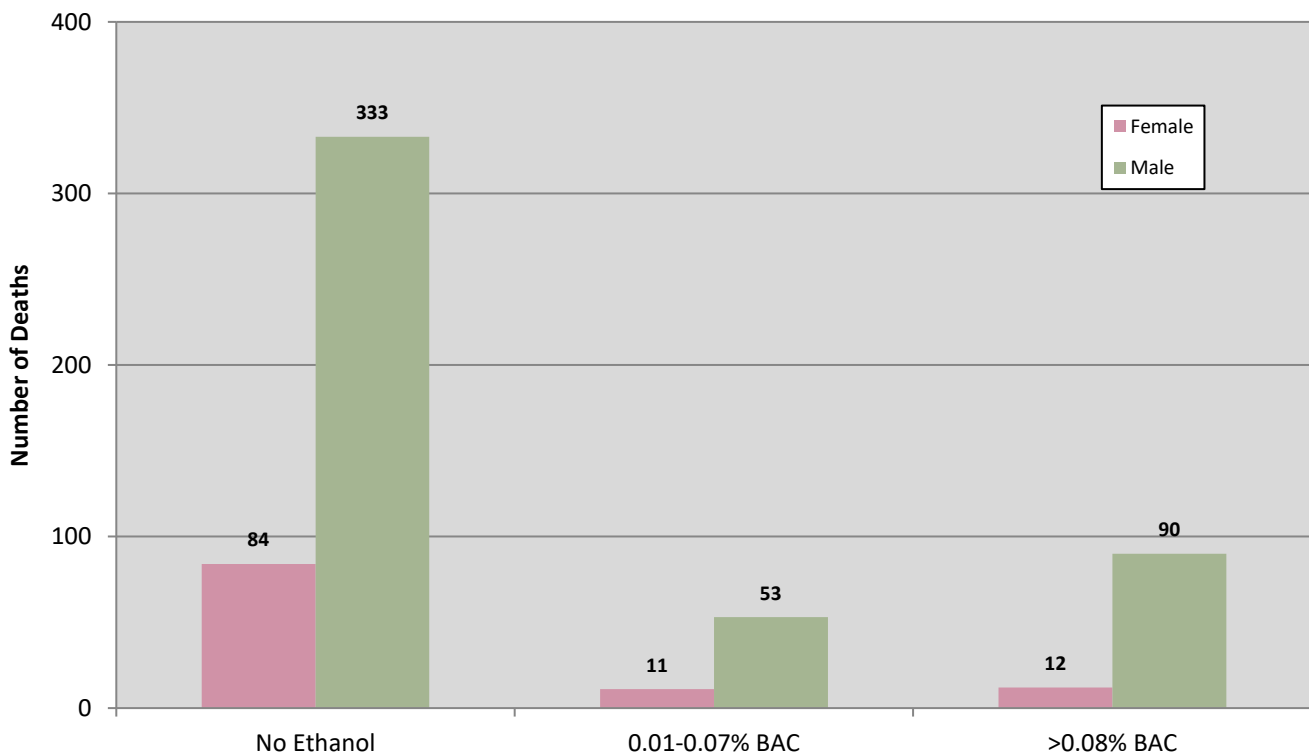
Figure 2.13 Number and Rate of Homicide Deaths by Race/Ethnicity and Gender, 2021

*No rate can be calculated

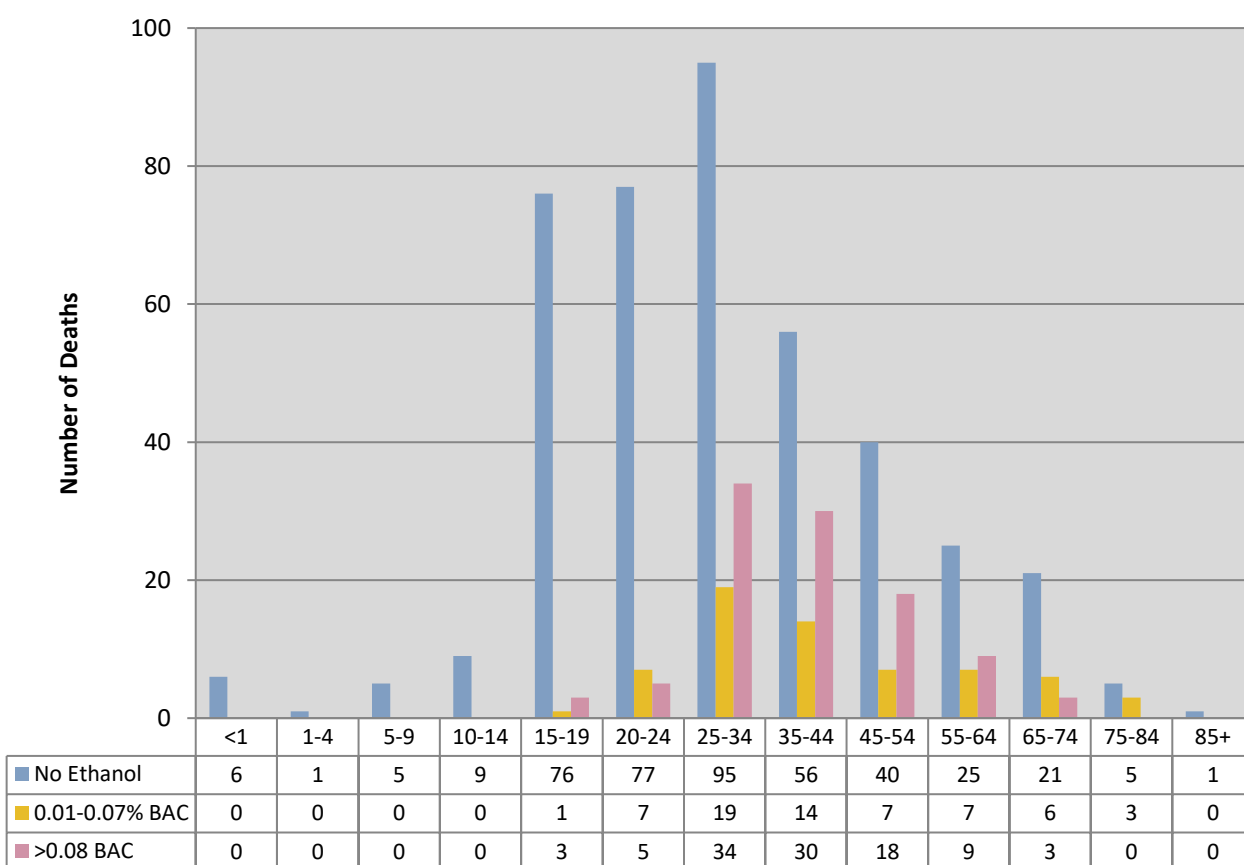
Note: Rates calculated from small case counts (n<5) are considered unreliable and should be interpreted with caution (Asians and Native American males)

Table 2.4 Number of Homicide Deaths by Cause and Method of Death, 2021

Method of Death	Autopsied	Total Cases
Asphyxia		
Strangled by assailant(s)	11	11
Suffocated/Smothered	1	1
Drug Poisoning		
Ingested and/or injected ethanol, illicit, prescription, and/or other type of drug	1	1
Fire		
Thermal and/or inhalational Injuries	3	4
Motor Vehicle Collision		
Struck by a vehicle	4	4
Traumatic Injury		
Beaten by assailant(s)	33	33
Shot by assailant(s)		
Handgun	316	316
Multiple	10	10
Rifle	24	24
Shotgun	7	7
Unspecified/Unknown	150	151
Stabbed by assailant(s)	39	39
Other/Undetermined		
Dehydration/Starvation	1	1
Other/Undetermined	9	9
TOTAL HOMICIDE DEATHS	609	611

Figure 2.14 Number of the Leading Homicide Deaths by Method, 2021**Figure 2.15 Number of Homicide Deaths by Ethanol Level and Gender (N=583), 2021**

Note: Of the 611 homicide deaths, 4.6% (n=28) did not receive toxicology testing

Figure 2.16 Number of Homicide Deaths by Age Group and Ethanol Level (N=583), 2021

Note: Of the 611 homicide deaths, 4.6% (n=28) did not receive toxicology testing

Table 2.5 Number of Homicide Deaths by Method of Death and Ethanol Level (N=583), 2021

Method of Death	No Ethanol	0.01-0.07% BAC	>0.08% BAC
Asphyxia			
Strangled by assailant(s)	10	0	1
Suffocated/Smothered	1	0	0
Drug Poisoning			
Ingested and/or injected ethanol, illicit, prescription, and/or other type of drug	1	0	0
Fire			
Thermal and/or inhalational Injuries	3	0	1
Motor Vehicle Collision			
Struck by a vehicle	2	0	1
Traumatic Injury			
Beaten by assailant(s)	20	2	5
Shot by assailant(s)			
Handgun	216	34	56
Multiple	7	1	2
Rifle	15	1	6
Shotgun	3	4	0
Unspecified/Unknown	106	17	21
Stabbed by assailant(s)	25	5	8
Other/Undetermined			
Dehydration/Starvation	1	0	0
Other/Undetermined	7	0	1
TOTAL HOMICIDE DEATHS	417	64	102

Note: Of the 611 homicide deaths, 4.6% (n=28) did not receive toxicology testing

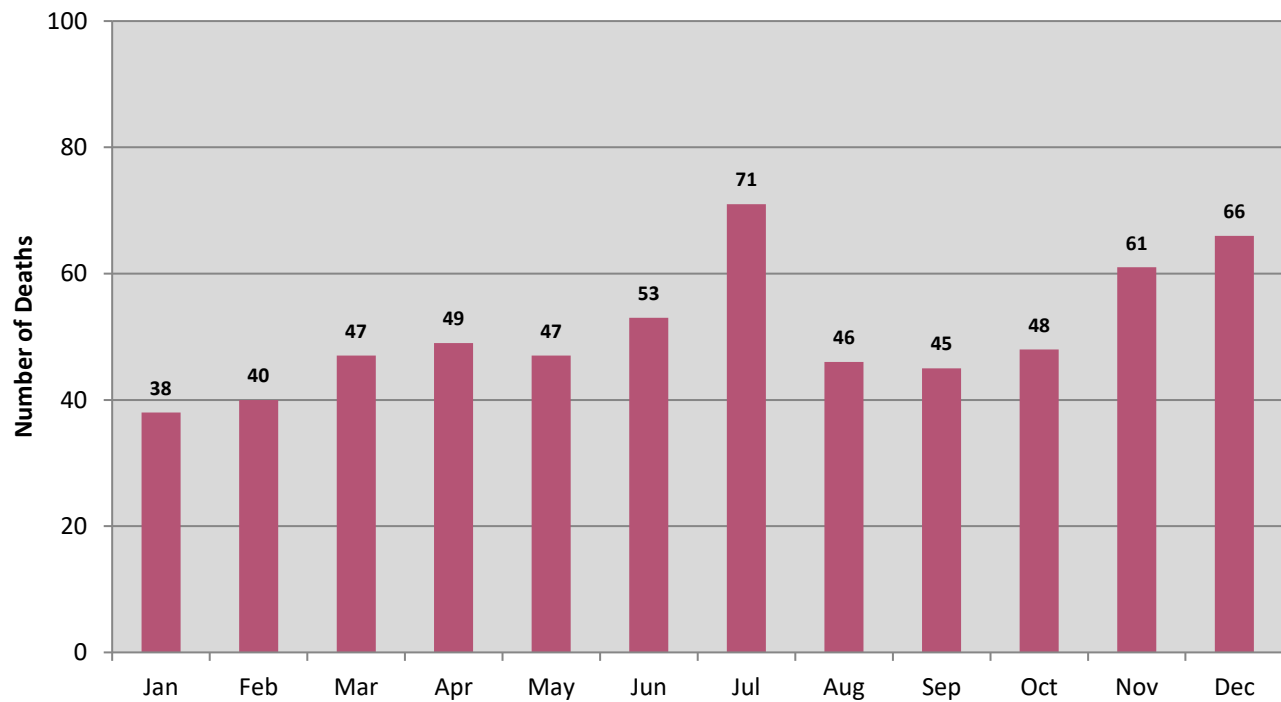
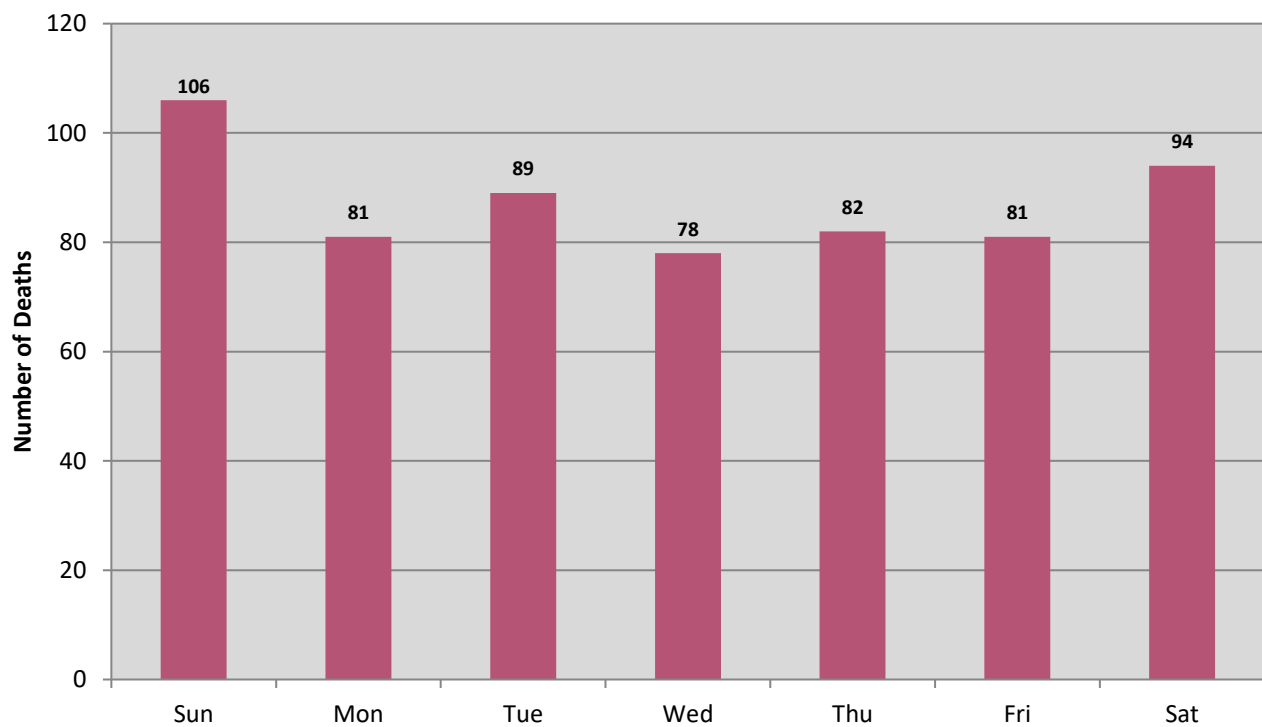
Figure 2.17 Number of Homicide Deaths by Month of Death, 2021**Figure 2.18 Number of Homicide Deaths by Day of Death, 2021**

Table 2.6 Number and Rate of Homicide Deaths by Locality of Residence, 2021

Locality of Residence	Deaths	Rate
Accomack County	9	27.9
Albemarle County	2	1.8
Alexandria City	1	0.6
Alleghany County	1	6.8
Amelia County	0	0.0
Amherst County	1	3.2
Appomattox County	1	6.2
Arlington County	0	0.0
Augusta County	2	2.6
Bath County	0	0.0
Bedford County	2	2.5
Bland County	0	0.0
Botetourt County	2	5.9
Bristol City	0	0.0
Brunswick County	2	12.5
Buchanan County	1	4.9
Buckingham County	3	17.5
Buena Vista City	0	0.0
Campbell County	2	3.6
Caroline County	1	3.2
Carroll County	1	3.3
Charles City County	0	0.0
Charlotte County	0	0.0
Charlottesville City	1	2.1
Chesapeake City	25	10.1
Chesterfield County	35	9.8
Clarke County	0	0.0
Colonial Heights City	1	5.8
Covington City	0	0.0
Craig County	0	0.0
Culpeper County	3	5.6
Cumberland County	1	10.1
Danville City	10	25.1
Dickenson County	2	14.2
Dinwiddie County	3	10.5
Emporia City	2	38.0
Essex County	1	9.1
Fairfax City	1	4.3
Fairfax County	20	1.7
Falls Church City	1	6.8
Fauquier County	5	7.0
Floyd County	2	12.7
Fluvanna County	0	0.0

Locality of Residence	Deaths	Rate
Franklin City	1	12.8
Franklin County	6	10.7
Frederick County	2	2.2
Fredericksburg City	2	6.8
Galax City	0	0.0
Giles County	1	6.0
Gloucester County	0	0.0
Goochland County	1	4.1
Grayson County	0	0.0
Greene County	0	0.0
Greensville County	1	8.9
Halifax County	2	5.9
Hampton City	28	20.7
Hanover County	2	1.8
Harrisonburg City	1	1.9
Henrico County	30	9.0
Henry County	3	6.0
Highland County	0	0.0
Hopewell City	3	13.4
Isle of Wight County	2	5.3
James City County	4	5.2
King and Queen County	0	0.0
King George County	1	3.7
King William County	0	0.0
Lancaster County	0	0.0
Lee County	3	12.9
Lexington City	0	0.0
Loudoun County	4	0.9
Louisa County	1	2.6
Lunenburg County	0	0.0
Lynchburg City	10	12.3
Madison County	1	7.5
Manassas	0	0.0
Manassas Park	1	5.6
Martinsville City	2	16.2
Mathews County	0	0.0
Mecklenburg County	4	13.0
Middlesex County	0	0.0
Montgomery County	2	2.0
Nelson County	0	0.0
New Kent County	0	0.0
Newport News City	31	17.3
Norfolk City	50	20.6

Locality of Residence	Deaths	Rate
Northampton County	1	8.6
Northumberland County	0	0.0
Norton City	1	25.1
Nottoway County	0	0.0
Orange County	2	5.3
Page County	4	16.7
Patrick County	0	0.0
Petersburg City	14	46.0
Pittsylvania County	1	1.7
Poquoson City	0	0.0
Portsmouth City	29	30.5
Powhatan County	1	3.3
Prince Edward County	0	0.0
Prince George County	2	5.2
Prince William County	12	2.5
Pulaski County	2	5.9
Radford City	0	0.0
Rappahannock County	0	0.0
Richmond City	69	29.7
Richmond County	0	0.0
Roanoke City	17	17.2
Roanoke County	3	3.2
Rockbridge County	1	4.4
Rockingham County	4	4.9
Russell County	1	3.8
Salem City	3	11.8
Scott County	0	0.0

Locality of Residence	Deaths	Rate
Shenandoah County	1	2.3
Smyth County	1	3.3
Southampton County	1	5.7
Spotsylvania County	7	5.1
Stafford County	3	1.9
Staunton City	0	0.0
Suffolk City	10	10.6
Surry County	0	0.0
Sussex County	1	9.2
Tazewell County	1	2.5
Virginia Beach City	25	5.5
Warren County	0	0.0
Washington County	0	0.0
Waynesboro City	0	0.0
Westmoreland County	0	0.0
Williamsburg City	0	0.0
Winchester City	1	3.6
Wise County	1	2.7
Wythe County	1	3.5
York County	1	1.4
<i>Subtotal (in-state)</i>	564	6.6
Out of State	43	ND
Unknown	4	ND
<i>Subtotal (out-of-state)</i>	47	ND
TOTAL	611	7.1

Note: No denominator is represented by ND.

Table 2.7 Top 10 Localities with the Largest Number of Residential Homicides, 2021

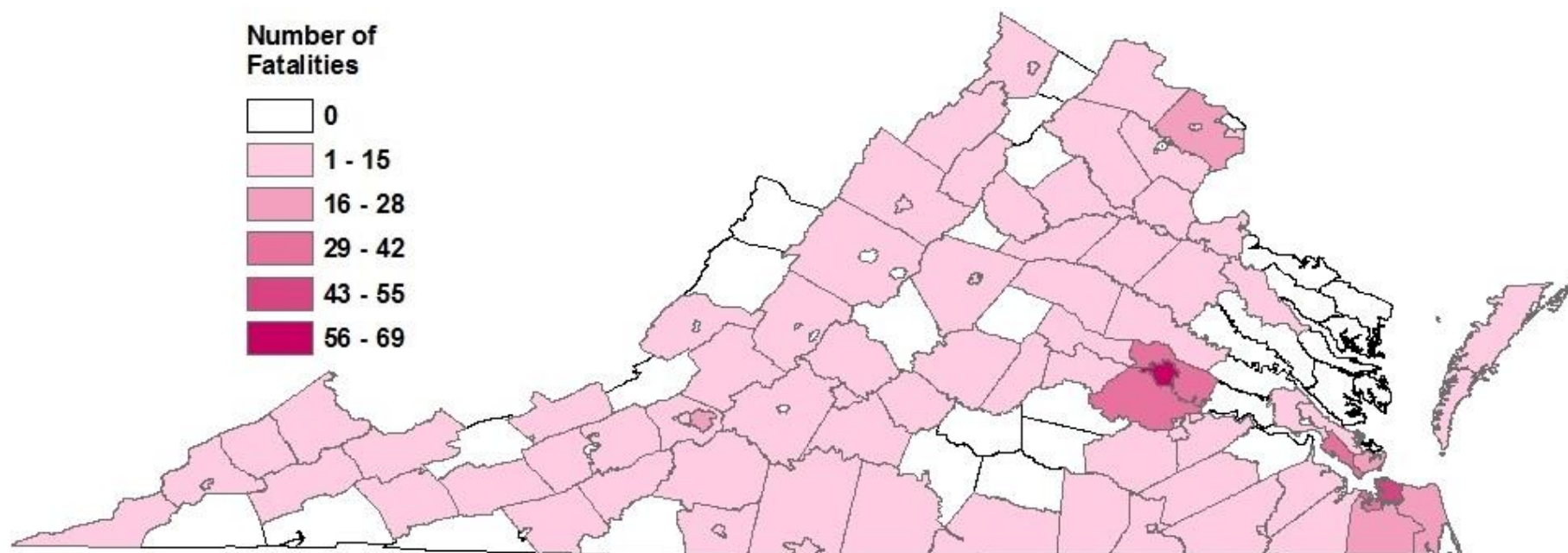
Rank #	Locality of Residence	Homicide #
1	Richmond City	69
2	Norfolk City	50
3	Out of State	43
4	Chesterfield County	35
5	Newport News City	31
6	Henrico County	30
7	Portsmouth City	29
8	Hampton City	28
9	Chesapeake City	25
	Virginia Beach City	25

Table 2.8 Top 10 Localities with the Highest Rate of Residential Homicides, 2021

Rank #	Locality of Residence	Homicide Rate
1	Petersburg City	46.0
2	Emporia City	38.0*
3	Portsmouth City	30.5
4	Richmond City	29.7
5	Accomack County	27.9
6	Norton City	25.1*
	Danville City	25.1
8	Hampton City	20.7
9	Norfolk City	20.6
10	Buckingham County	17.5*

*Unstable rate based on small sample size (<5 deaths)

Map 2.1 Number of Homicides by Locality of Residence, 2021



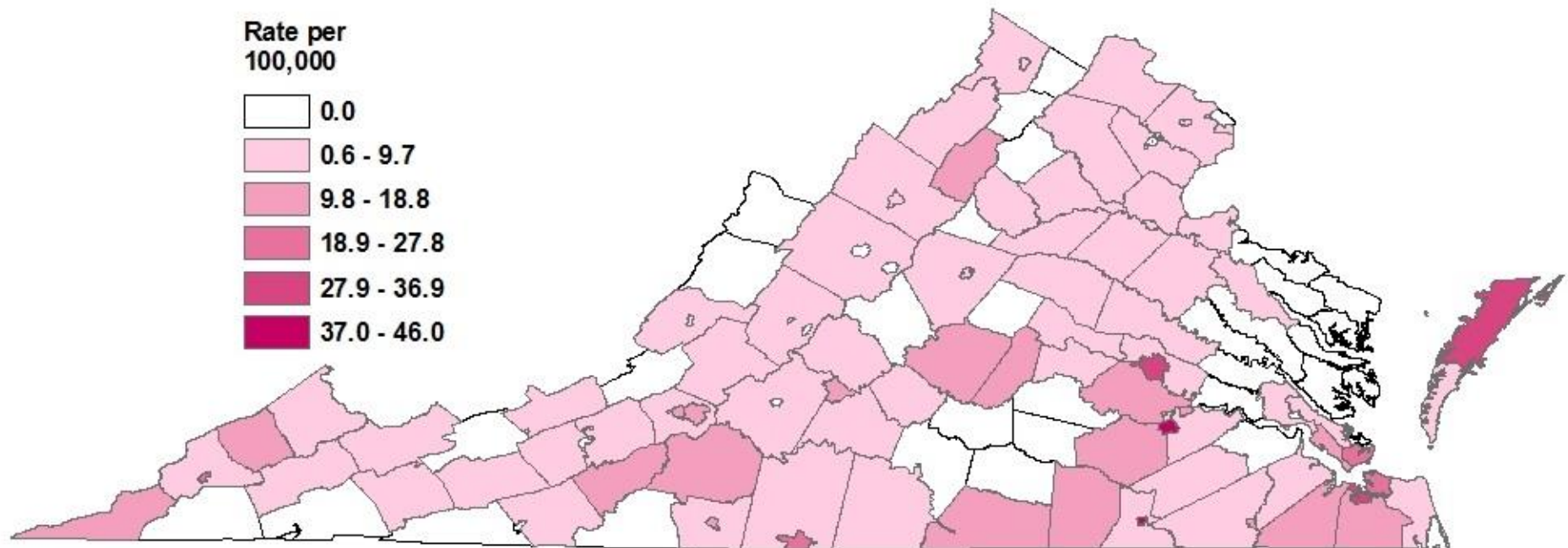
Map 2.2 Homicide Rates by Locality of Residence, 2021

Table 2.9 Number and Rate of Homicide Deaths by Locality of Injury, 2021

Locality of Injury	Deaths	Rate
Accomack County	9	27.9
Albemarle County	0	0.0
Alexandria City	2	1.3
Alleghany County	0	0.0
Amelia County	0	0.0
Amherst County	2	6.3
Appomattox County	1	6.2
Arlington County	1	0.4
Augusta County	2	2.6
Bath County	0	0.0
Bedford County	4	5.0
Bland County	0	0.0
Botetourt County	0	0.0
Bristol City	1	5.8
Brunswick County	1	6.2
Buchanan County	1	4.9
Buckingham County	1	5.8
Buena Vista City	0	0.0
Campbell County	3	5.4
Caroline County	3	9.7
Carroll County	1	3.3
Charles City County	0	0.0
Charlotte County	0	0.0
Charlottesville City	0	0.0
Chesapeake City	24	9.7
Chesterfield County	14	3.9
Clarke County	0	0.0
Colonial Heights City	3	17.4
Covington City	0	0.0
Craig County	1	19.7
Culpeper County	2	3.7
Cumberland County	0	0.0
Danville City	6	15.0
Dickenson County	1	7.1
Dinwiddie County	4	13.9
Emporia City	1	19.0
Essex County	1	9.1
Fairfax City	0	0.0
Fairfax County	25	2.2
Falls Church City	0	0.0
Fauquier County	4	5.6
Floyd County	1	6.3

Locality of Injury	Deaths	Rate
Fluvanna County	0	0.0
Franklin City	2	25.5
Franklin County	6	10.7
Frederick County	2	2.2
Fredericksburg City	3	10.2
Galax City	0	0.0
Giles County	1	6.0
Gloucester County	0	0.0
Goochland County	1	4.1
Grayson County	0	0.0
Greene County	0	0.0
Greensville County	1	8.9
Halifax County	6	17.8
Hampton City	31	22.9
Hanover County	2	1.8
Harrisonburg City	2	3.8
Henrico County	25	7.5
Henry County	3	6.0
Highland County	0	0.0
Hopewell City	3	13.4
Isle of Wight County	2	5.3
James City County	2	2.6
King and Queen County	0	0.0
King George County	2	7.3
King William County	0	0.0
Lancaster County	0	0.0
Lee County	3	12.9
Lexington City	0	0.0
Loudoun County	4	0.9
Louisa County	1	2.6
Lunenburg County	1	8.2
Lynchburg City	9	11.0
Madison County	1	7.5
Manassas	1	2.4
Manassas Park	0	0.0
Martinsville City	3	24.3
Mathews County	0	0.0
Mecklenburg County	0	0.0
Middlesex County	0	0.0
Montgomery County	2	2.0
Nelson County	0	0.0
New Kent County	0	0.0

Locality of Injury	Deaths	Rate
Newport News City	30	16.8
Norfolk City	64	26.4
Northampton County	0	0.0
Northumberland County	0	0.0
Norton City	0	0.0
Nottoway County	0	0.0
Orange County	2	5.3
Page County	3	12.5
Patrick County	0	0.0
Petersburg City	20	65.7
Pittsylvania County	4	6.7
Poquoson City	0	0.0
Portsmouth City	36	37.9
Powhatan County	0	0.0
Prince Edward County	2	8.7
Prince George County	3	7.8
Prince William County	13	2.7
Pulaski County	3	8.8
Radford City	0	0.0
Rappahannock County	1	13.8
Richmond City	106	45.6
Richmond County	0	0.0
Roanoke City	19	19.2
Roanoke County	3	3.2
Rockbridge County	1	4.4
Rockingham County	5	6.1
Russell County	1	3.8
Salem City	0	0.0
Scott County	1	4.6

Locality of Injury	Deaths	Rate
Shenandoah County	1	2.3
Smyth County	1	3.3
Southampton County	0	0.0
Spotsylvania County	7	5.1
Stafford County	4	2.6
Staunton City	0	0.0
Suffolk City	7	7.5
Surry County	0	0.0
Sussex County	0	0.0
Tazewell County	1	2.5
Virginia Beach City	14	3.1
Warren County	0	0.0
Washington County	2	3.7
Waynesboro City	1	4.4
Westmoreland County	0	0.0
Williamsburg City	1	6.6
Winchester City	1	3.6
Wise County	3	8.1
Wythe County	0	0.0
York County	2	2.9
<i>Subtotal (in-state)</i>	600	7.0
Out of State	2	ND
Unknown	9	ND
<i>Subtotal (out-of-state)</i>	11	ND
TOTAL	611	7.1

Note: No denominator is represented by ND.

Table 2.10 Top 10 Localities with the Largest Number of Homicides by Locality of Injury, 2021

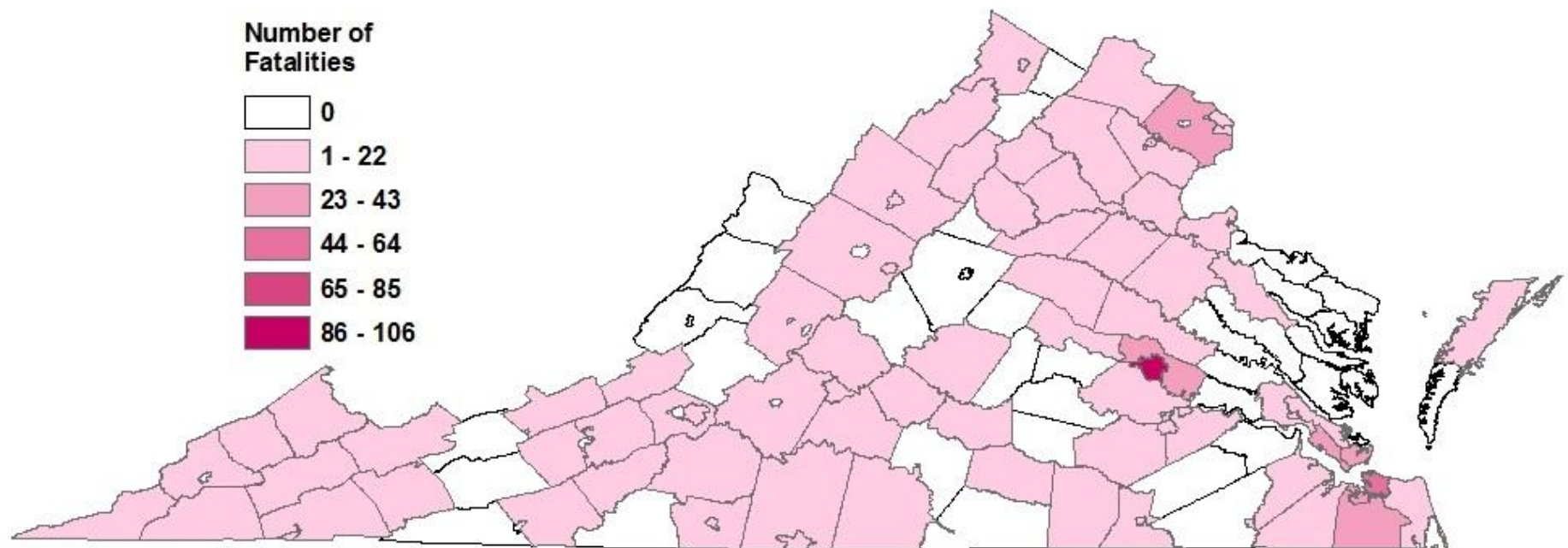
Rank #	Locality of Injury	Homicide #
1	Richmond City	106
2	Norfolk City	64
3	Portsmouth City	36
4	Hampton City	31
5	Newport News City	30
6	Fairfax County	25
	Henrico County	25
8	Chesapeake City	24
9	Petersburg City	20
10	Roanoke City	19

Table 2.11 Top 10 Localities with the Highest Rate of Homicide by Locality of Injury, 2021

Rank #	Locality of Injury	Homicide Rate
1	Petersburg City	65.7
2	Richmond City	45.6
3	Portsmouth City	37.9
4	Accomack County	27.9
5	Norfolk City	26.4
6	Franklin City	25.5
7	Martinsville City	24.3
8	Hampton City	22.9
9	Craig County	19.7
10	Roanoke City	19.2

*Unstable rate based on small sample size (<5 deaths)

Map 2.3 Number of Homicides by Locality of Injury, 2021



Map 2.4 Homicide Rates by Locality of Injury, 2021

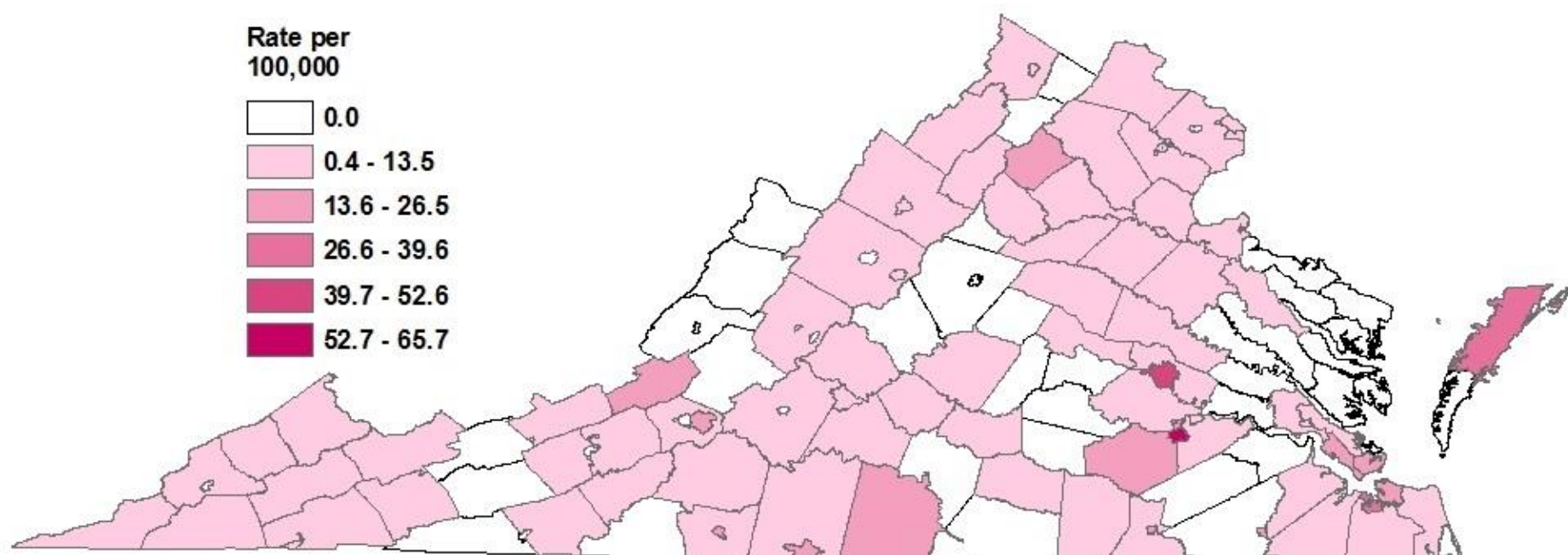


Table 2.12 Number of Homicide Deaths by Locality of Death and Year of Death, 2006-2021

Locality of Death	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	TOTAL
Accomack County	5	4	2	2	2	4	1	3	4	3	4	1	1	6	6	9	57
Albemarle County	1	0	1	0	3	0	3	2	2	1	0	4	1	1	5	2	26
Alexandria City	4	7	4	4	2	0	2	6	4	3	5	3	3	1	2	2	52
Alleghany County	0	3	1	0	2	2	1	2	0	0	0	0	0	0	1	0	12
Amelia County	0	0	0	0	0	0	0	0	0	0	2	1	0	0	1	0	4
Amherst County	0	1	1	1	0	1	0	1	2	0	1	0	0	3	0	2	13
Appomattox County	0	1	1	0	7	1	0	0	1	3	0	0	0	0	1	1	16
Arlington County	3	3	4	2	0	0	5	0	1	2	0	3	3	3	3	1	33
Augusta County	3	1	1	1	3	3	2	0	4	1	4	1	2	0	1	2	29
Bath County	0	0	0	2	0	0	0	0	0	0	0	1	0	0	0	0	3
Bedford City	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Bedford County	1	2	0	0	2	0	0	0	4	3	1	1	3	1	3	5	26
Bland County	0	0	0	1	1	0	0	0	0	0	0	0	0	0	3	0	5
Botetourt County	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	1	3
Bristol City	4	0	0	0	1	1	1	0	0	0	0	0	2	0	0	1	10
Brunswick County	3	1	2	0	0	0	1	0	0	0	0	0	0	0	1	1	9
Buchanan County	1	0	2	6	3	6	1	0	1	1	4	1	0	1	1	1	29
Buckingham County	1	1	0	0	0	1	0	0	2	0	1	1	0	0	1	1	9
Buena Vista City	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1
Campbell County	2	2	2	5	2	1	3	3	0	0	6	2	3	1	1	2	35
Caroline County	5	4	0	0	0	0	0	0	0	1	1	1	0	0	1	3	16
Carroll County	1	4	1	1	1	0	0	3	1	0	0	0	0	3	0	1	16
Charles City County	0	0	1	0	1	0	0	0	0	0	0	0	0	1	1	0	4
Charlotte County	0	0	1	1	0	1	1	1	0	2	2	0	1	0	0	0	10
Charlottesville City	5	6	12	3	5	3	4	5	8	4	4	10	5	5	6	3	88
Chesapeake City	7	7	7	10	9	10	9	8	8	11	11	6	6	7	10	18	144
Chesterfield County	5	6	8	3	6	11	9	9	9	8	6	11	2	10	9	10	122
Clarke County	0	0	1	1	0	0	0	0	0	0	1	1	0	1	0	0	5
Colonial Heights City	0	0	0	0	0	2	0	0	1	1	0	1	0	0	0	3	8
Covington City	0	0	0	0	1	0	0	1	0	0	0	0	0	0	1	0	3
Craig County	0	0	1	0	0	0	0	0	0	0	0	0	1	0	2	1	5

Locality of Death	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	TOTAL
Culpeper County	1	1	0	0	0	3	1	2	6	1	4	2	1	0	2	2	26
Cumberland County	0	1	0	2	0	0	1	0	0	0	0	0	0	2	0	0	6
Danville City	5	5	8	10	7	7	5	5	3	6	15	14	13	6	4	9	122
Dickenson County	0	1	1	1	2	2	0	1	1	0	0	1	0	2	2	1	15
Dinwiddie County	5	1	1	0	2	0	3	4	0	2	2	0	1	0	1	2	24
Emporia City	1	2	2	1	2	1	1	0	1	2	0	2	1	1	2	1	20
Essex County	0	0	0	0	1	1	0	1	1	1	0	0	0	0	0	0	5
Fairfax City	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	2
Fairfax County	29	20	28	24	20	16	19	10	16	17	27	29	20	23	21	33	352
Falls Church City	0	0	0	1	0	0	1	1	0	0	0	0	0	0	1	0	4
Fauquier County	2	4	1	2	1	1	3	2	1	1	1	2	4	2	6	3	36
Floyd County	0	0	2	1	0	1	0	0	0	0	0	0	0	1	1	1	7
Fluvanna County	0	0	1	0	0	0	0	0	0	1	0	0	1	1	0	0	4
Franklin City	0	0	0	2	1	0	0	0	1	0	0	1	1	2	2	2	12
Franklin County	2	1	0	4	4	2	0	4	2	9	0	4	1	4	6	5	48
Frederick County	7	0	1	2	1	1	2	2	2	2	0	0	1	1	3	1	26
Fredericksburg City	0	2	3	4	3	3	3	4	1	7	4	4	4	5	4	6	57
Galax City	1	2	0	1	0	0	0	0	0	0	2	1	0	0	0	0	7
Giles County	1	0	0	0	0	0	0	0	1	0	0	0	1	0	3	1	7
Gloucester County	0	1	1	0	1	2	3	0	0	0	1	2	1	3	3	0	18
Goochland County	1	0	2	0	1	0	0	1	1	1	0	0	0	0	0	1	8
Grayson County	0	0	7	0	0	0	0	1	0	1	0	1	0	3	0	0	13
Greene County	0	1	0	0	0	3	0	0	0	0	0	0	0	1	1	0	6
Greensville County	5	0	5	4	3	2	0	2	0	1	0	3	0	0	1	1	27
Halifax County	1	3	5	0	2	2	0	0	0	1	3	2	4	4	4	6	37
Hampton City	14	6	4	7	9	3	7	20	7	11	12	13	11	15	20	24	183
Hanover County	2	0	1	0	2	2	5	0	1	3	2	2	3	0	0	1	24
Harrisonburg City	4	0	0	0	1	2	1	1	0	1	2	0	1	0	1	2	16
Henrico County	10	6	15	7	9	9	9	6	6	9	14	18	7	7	11	17	160
Henry County	7	3	3	5	6	4	5	1	3	2	2	0	3	1	7	3	55
Highland County	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1

Locality of Death	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	TOTAL
Hopewell City	4	2	4	2	2	1	2	2	5	3	5	2	6	4	5	3	52
Isle of Wight County	1	0	0	1	0	1	2	1	1	1	0	2	0	1	1	0	12
James City County	1	0	1	0	0	1	1	2	0	2	2	1	0	1	3	3	18
King and Queen County	0	0	0	0	0	0	1	0	0	0	1	0	1	0	0	0	3
King George County	0	0	0	1	0	0	0	0	1	1	0	0	1	0	1	1	6
King William County	0	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0	2
Lancaster County	2	0	1	0	2	1	1	0	0	0	0	0	0	0	2	0	9
Lee County	0	1	2	1	4	4	0	2	0	0	0	0	1	2	0	2	19
Lexington City	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Loudoun County	4	1	3	4	1	2	2	5	4	2	4	4	4	0	2	3	45
Louisa County	0	4	1	1	3	0	1	0	1	0	3	2	0	3	0	1	20
Lunenburg County	1	1	2	1	0	0	0	1	0	0	1	1	0	2	1	0	11
Lynchburg City	2	1	5	0	4	5	3	1	8	4	3	5	7	4	5	8	65
Madison County	0	0	1	0	1	3	1	1	0	1	0	1	0	0	1	1	11
Manassas	1	2	5	2	0	3	1	1	2	0	1	2	2	2	1	1	26
Manassas Park	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1
Martinsville City	0	2	3	0	4	3	1	2	2	3	1	3	1	3	2	3	33
Mathews County	0	0	0	1	0	0	0	0	0	0	1	1	0	0	0	0	3
Mecklenburg County	0	1	4	3	2	1	0	2	1	1	3	1	2	2	4	1	28
Middlesex County	1	0	0	0	0	1	0	1	2	0	0	1	1	0	0	0	7
Montgomery County	3	31	2	8	2	1	0	2	2	2	0	2	1	0	1	2	59
Nelson County	0	1	0	1	1	1	0	1	0	0	0	1	1	1	1	0	9
New Kent County	0	0	1	1	0	0	0	0	0	0	0	0	0	1	0	0	3
Newport News City	20	31	23	31	30	21	29	18	26	31	43	32	34	27	33	42	471
Norfolk City	34	75	41	63	47	40	56	38	48	48	64	50	51	48	71	90	864
Northampton County	2	3	0	0	2	1	1	4	0	3	3	0	0	0	1	0	20
Northumberland County	0	1	0	0	0	0	1	0	0	0	0	0	0	1	0	0	3
Norton City	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
Nottoway County	0	1	0	0	0	0	2	0	1	0	2	0	1	1	2	0	10
Orange County	2	0	1	0	1	0	1	0	2	0	0	0	2	0	0	2	11
Page County	1	0	0	0	1	0	1	0	3	0	0	0	0	0	0	3	9

Locality of Death	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	TOTAL
Patrick County	0	1	0	0	0	0	0	0	1	2	0	0	3	0	1	0	8
Petersburg City	10	8	4	11	11	8	5	6	12	18	9	10	14	19	21	19	185
Pittsylvania County	2	3	3	2	4	4	1	0	2	0	3	1	3	10	3	3	44
Poquoson City	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Portsmouth City	18	11	14	16	13	13	8	7	7	23	9	13	17	16	21	21	227
Powhatan County	0	0	3	1	1	3	0	0	0	1	1	1	0	0	0	0	11
Prince Edward County	0	1	1	7	1	1	1	3	0	0	0	4	0	2	0	1	22
Prince George County	0	0	0	1	2	0	0	1	1	0	0	2	1	0	2	3	13
Prince William County	12	11	10	9	8	7	1	5	4	9	15	5	8	12	8	10	134
Pulaski County	1	0	2	1	2	0	1	1	4	0	2	2	0	1	0	3	20
Radford City	1	0	0	0	1	0	1	0	0	0	0	0	0	1	0	0	4
Rappahannock County	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	3
Richmond City	85	76	47	58	56	50	55	56	55	55	82	96	72	80	94	123	1140
Richmond County	0	0	1	0	0	0	0	0	0	0	0	0	1	0	1	0	3
Roanoke City	13	12	23	14	14	15	12	18	7	17	19	28	21	19	24	26	282
Roanoke County	1	2	0	1	4	0	1	0	1	0	2	0	6	1	2	1	22
Rockbridge County	0	1	0	0	1	1	0	0	0	1	0	3	1	1	0	1	10
Rockingham County	1	1	1	2	0	1	0	0	4	0	0	2	2	2	4	3	23
Russell County	2	0	1	1	0	2	0	2	3	0	0	1	0	0	1	1	14
Salem City	0	1	1	0	1	0	1	0	0	1	1	0	0	0	0	0	6
Scott County	0	2	1	0	1	1	1	0	0	0	2	0	2	1	2	0	13
Shenandoah County	0	0	0	1	0	0	1	1	3	0	1	0	2	3	0	1	13
Smyth County	0	0	1	0	0	2	1	0	0	0	2	2	1	0	4	1	14
Southampton County	1	3	0	2	1	0	0	0	0	0	3	0	1	1	0	0	12
Spotsylvania County	4	4	0	3	5	2	1	3	1	1	2	2	1	4	5	7	45
Stafford County	1	2	3	4	1	2	1	3	1	4	5	2	3	4	1	3	40
Staunton City	0	0	1	2	0	0	0	1	1	1	0	0	0	0	1	0	7
Suffolk City	8	2	5	5	3	3	2	6	2	2	5	1	2	7	3	4	60
Surry County	0	0	1	0	2	0	0	0	0	0	0	0	0	0	0	0	3
Sussex County	1	0	1	0	0	0	1	2	0	0	0	2	4	1	1	0	13
Tazewell County	0	3	2	5	3	0	2	0	1	1	1	1	0	0	1	1	21

Locality of Death	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	TOTAL
Virginia Beach City	20	16	18	16	13	14	14	17	17	18	19	13	20	30	21	12	278
Warren County	2	0	0	1	0	0	0	0	1	1	0	3	0	1	0	0	9
Washington County	0	0	2	1	2	2	1	2	4	0	0	6	3	2	5	2	32
Waynesboro City	0	1	0	0	1	0	0	0	0	0	1	0	1	2	2	0	8
Westmoreland County	2	1	1	0	0	0	1	0	0	2	0	1	0	0	1	0	9
Williamsburg City	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Winchester City	2	2	2	0	0	2	1	1	1	2	0	1	1	2	4	2	23
Wise County	0	2	0	2	0	0	4	0	2	2	2	1	4	0	2	3	24
Wythe County	1	0	2	0	0	1	0	0	0	0	0	2	2	3	3	0	14
York County	3	1	1	0	0	3	0	4	4	1	2	1	3	1	4	0	28
<i>Subtotal (in-state)</i>	<i>422</i>	<i>439</i>	<i>397</i>	<i>408</i>	<i>388</i>	<i>341</i>	<i>337</i>	<i>338</i>	<i>354</i>	<i>387</i>	<i>470</i>	<i>468</i>	<i>427</i>	<i>458</i>	<i>546</i>	<i>610</i>	6790
Out of State	1	1	2	4	3	4	7	1	4	2	7	1	3	3	3	1	47
Unknown	4	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	5
<i>Subtotal (out-of-state)</i>	<i>5</i>	<i>1</i>	<i>2</i>	<i>4</i>	<i>3</i>	<i>4</i>	<i>7</i>	<i>1</i>	<i>5</i>	<i>2</i>	<i>7</i>	<i>1</i>	<i>3</i>	<i>3</i>	<i>3</i>	<i>1</i>	52
TOTAL	427	440	399	412	391	345	344	339	359	389	477	469	430	461	549	611	6842

Note: Bedford City was incorporated into Bedford County in 2014 and therefore numbers are combined from there forward

NATURAL DEATHS (N=2,422)

Most natural deaths that occur in Virginia do not fall under the jurisdiction of the OCME. Natural deaths enter the medical examiner system as deaths that are sudden, unexpected, or suspicious, which upon examination and investigation are then established as natural. Natural deaths may also fall under the OCME's jurisdiction when the decedent does not have a primary care physician to certify their deaths, the decedent dies while in-custody, or the decedent is a patient of a state mental health facility.

- Natural deaths accounted for 25.2% of all deaths investigated by the OCME in 2021
- The number of natural deaths accepted by OCME increased in 2021 compared with 2020 (an increase of 174 deaths or 7.7%).

Figure 2.19 Number and Rate of Natural Deaths Investigated by the OCME by Year of Death, 1999-2021

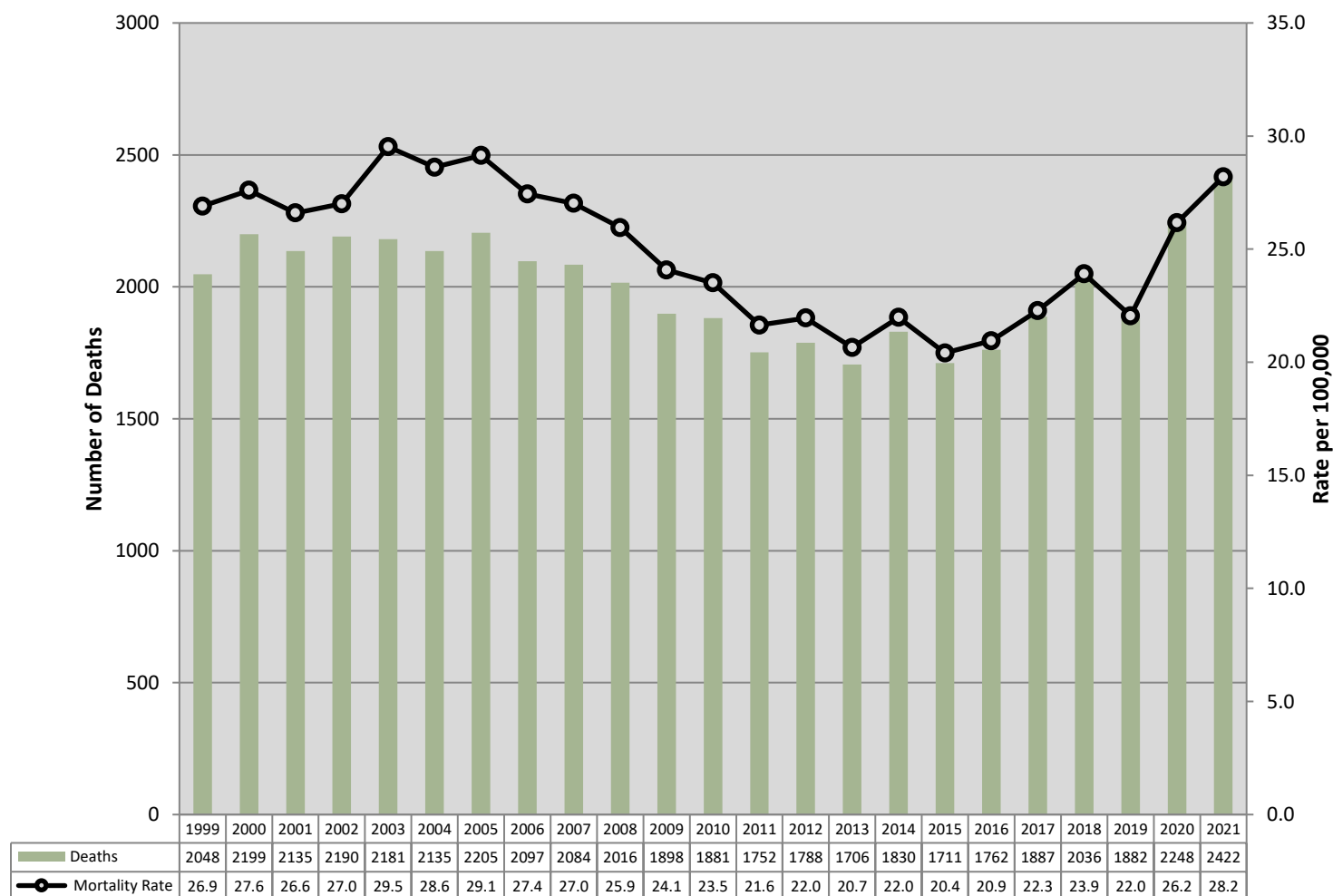


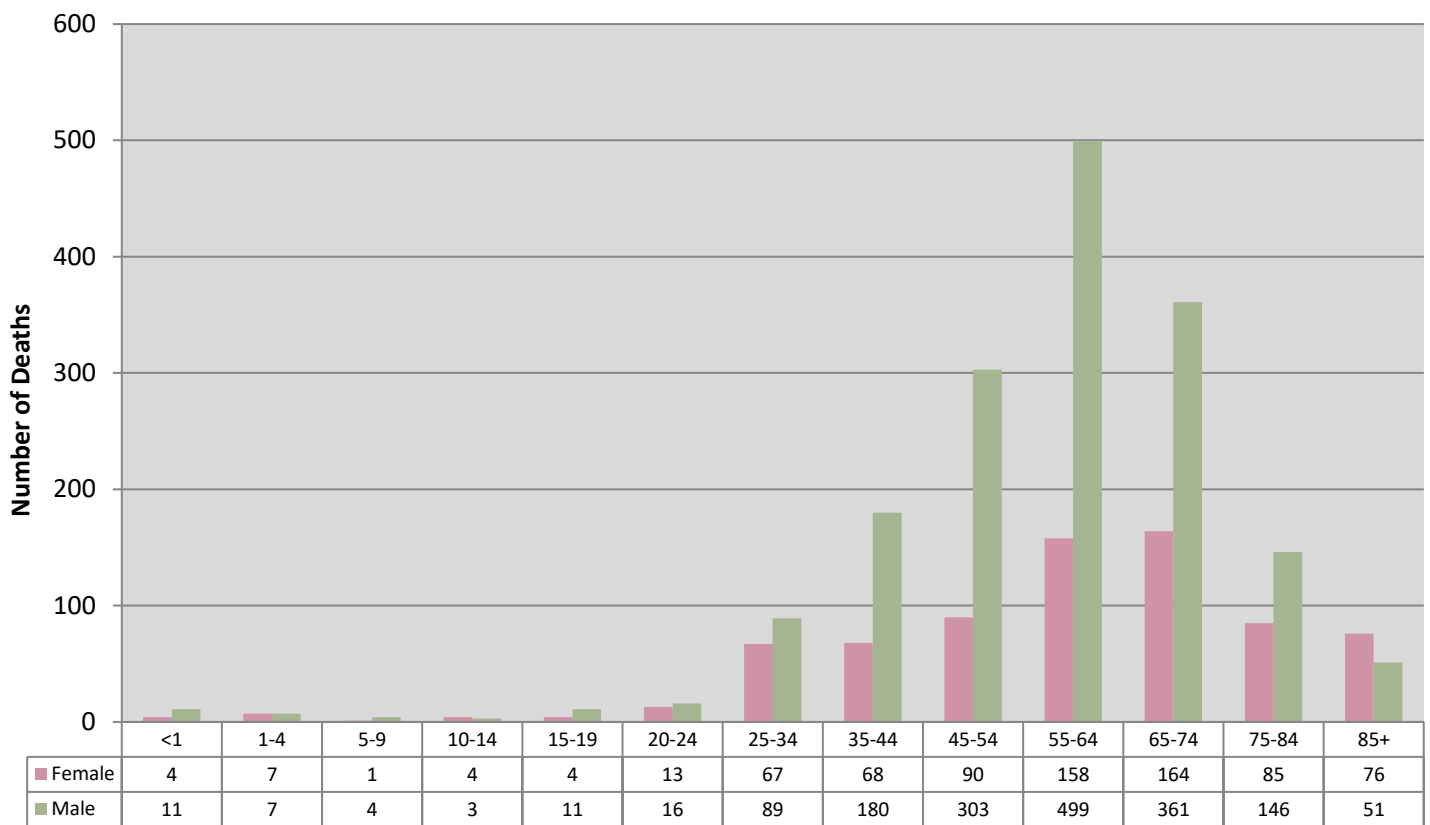
Figure 2.20 Number of Natural Deaths Investigated by the OCME by Age Group and Gender, 2021

Table 2.13 Number of Natural Deaths Investigated by the OCME by Cause and Method of Death, 2021

Method and Cause of Death	Autopsied	Total Cases
Cardiovascular Diseases/Disorders		
Atherosclerosis	52	659
Hypertension	39	284
Atherosclerosis and Hypertension	70	180
Congenital Defect	4	4
Vascular Dissection/Rupture	8	12
Valvular	2	2
Acute Coronary Insufficiency	25	301
Cardiac Arrhythmia (not otherwise specified)	24	43
Cardiomyopathy (not otherwise specified)	20	33
Other Cardiac Disease/Disorder	14	28
Central Nervous System Diseases/Disorders		
Seizure Disorder	18	35
Vascular Disease	14	39
Degenerative Disease	3	9
Meningitis (Bacterial or Viral)	2	3
CNS Malignancy	1	3
Other CNS Disease/Disorder	4	8
Gastrointestinal Diseases/Disorders		
GI Hemorrhage	6	16
Cirrhosis	6	14
Hepatitis	0	4
GI Malignancy	8	17
Other GI Disease/Disorder	9	15
Genitourinal Diseases/Disorders		
Renal Disease	1	7
Genitourinal Malignancy	1	7
Other Genitourinal Disease/Disorder	0	1
Other Natural Diseases/Disorders		
Other malignancy	7	11
Other natural disease/disorder	3	9
Perinatal and Pediatric Diseases/Disorders		
Maternal Complications	3	3
Fetal Complications	1	1
Other Perinatal or Pediatric Disease/Disorder	2	3
Pulmonary Disease/Disorders		
Asthma	4	7
COPD	4	35
Emboli	28	34

Pneumonia	13	79
Pulmonary Malignancy	4	22
Other Pulmonary Disease/Disorder	9	35
Systemic Diseases/Disorders		
Blood Disorder	2	6
Diabetes	16	85
HIV/AIDS	0	1
Sepsis	7	10
Other Infectious Disease	10	86
Metastatic Malignancy of Unknown Primary	0	2
Obesity	1	11
Chronic Alcoholism	41	219
Chronic Drug Abuse	2	9
Other Systemic Disease/Disorder	7	19
Complications of Dementia (Including Inanition)	5	11
TOTAL NATURAL DEATHS	500	2422

SUICIDE DEATHS (N=1,201)

In general, suicide deaths have been slowly increasing since 1999. The number of suicide deaths in 2021 compared to 2020 was nearly identical. The largest number of victims were male (80.2%), White (79.9%), and aged 25-34 years of age (18.3%). Males 85+ years of age and older as well as white males had the highest rates of suicide compared to other groups within the total population (51.7 and 29.5 per 100,000 persons, respectively).

- Whites committed suicide at a rate 4.8 times that of Hispanics, 3.8 times that of Asians, and 2.2 times that of Black populations
- Males were 4.1 times more likely to commit suicide than females
- Firearms (specifically handguns), hangings, and drug use were the three most commonly used methods in suicides, with these deaths representing 59.7%, 20.2%, and 10.6% of all suicides, respectively

Figure 2.21 Number and Rate of Suicide Deaths by Year of Death, 1999-2021

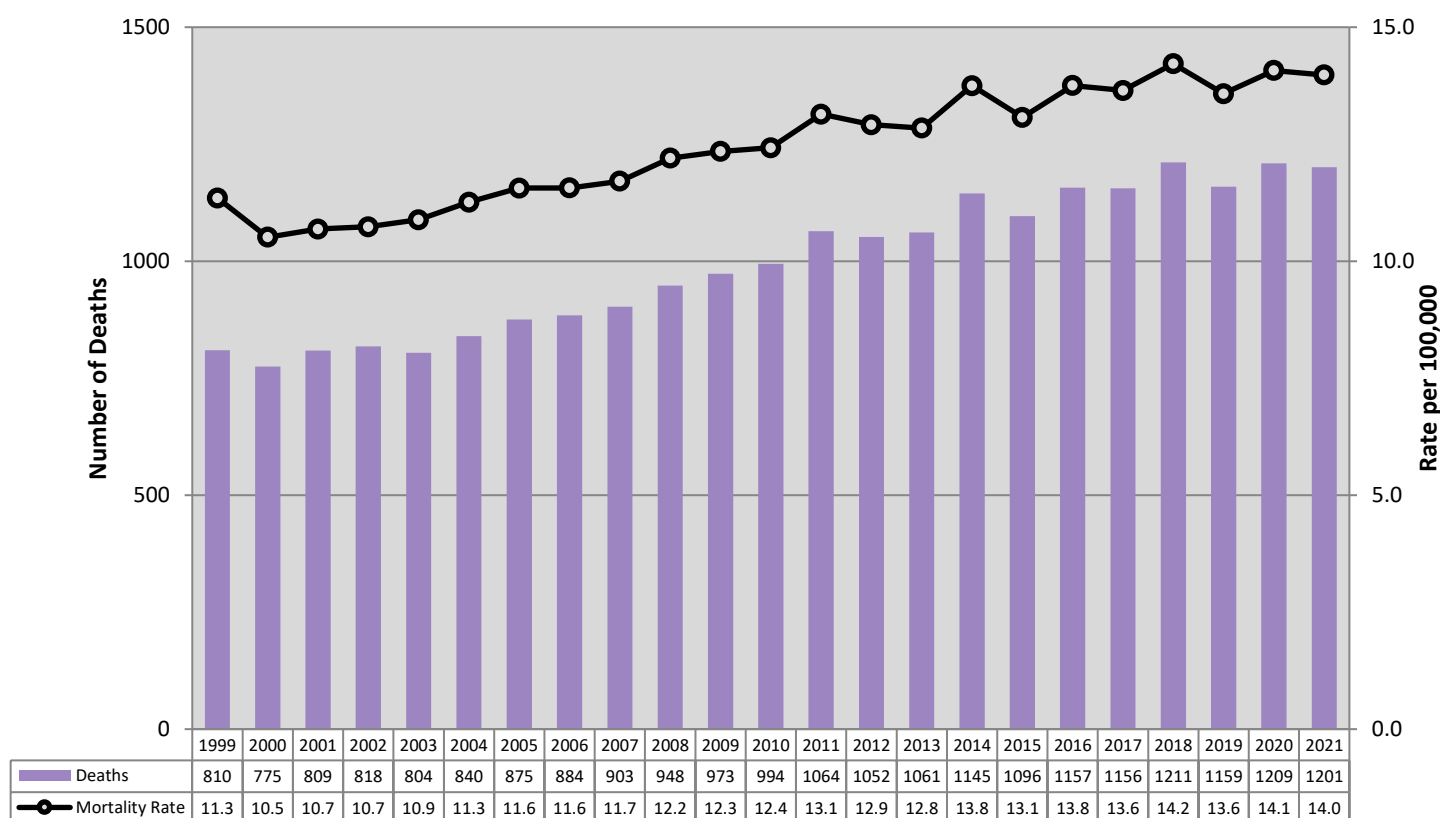


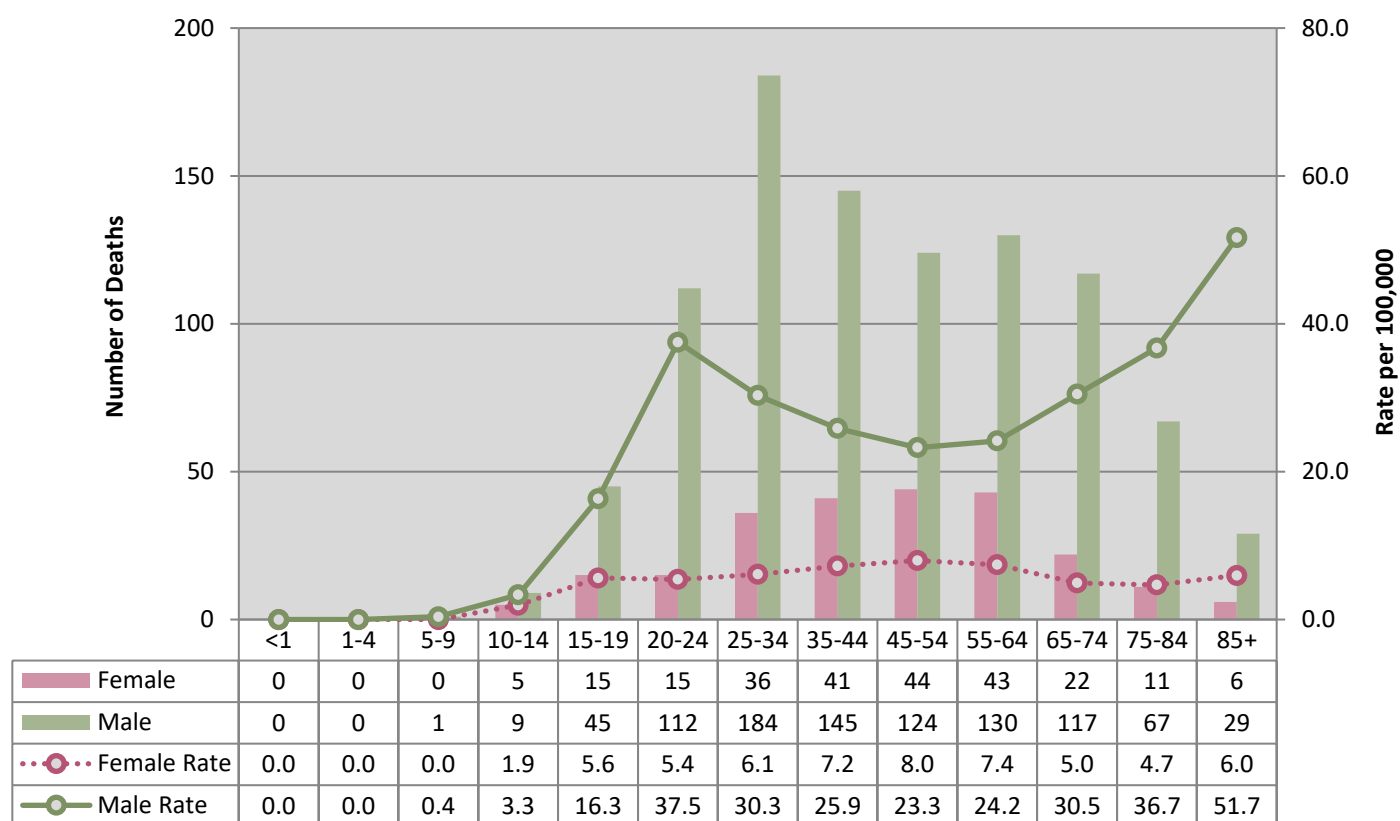
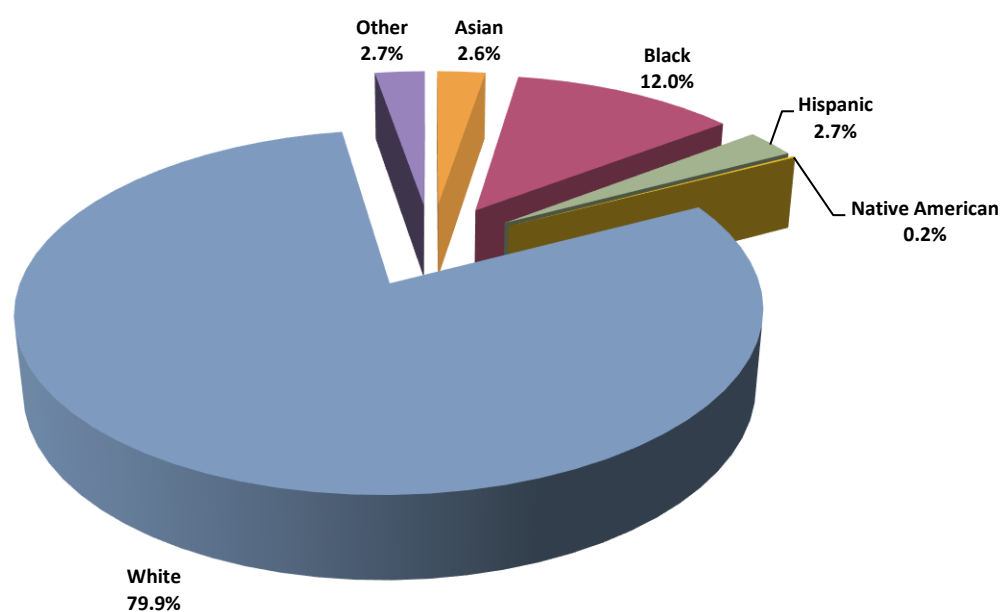
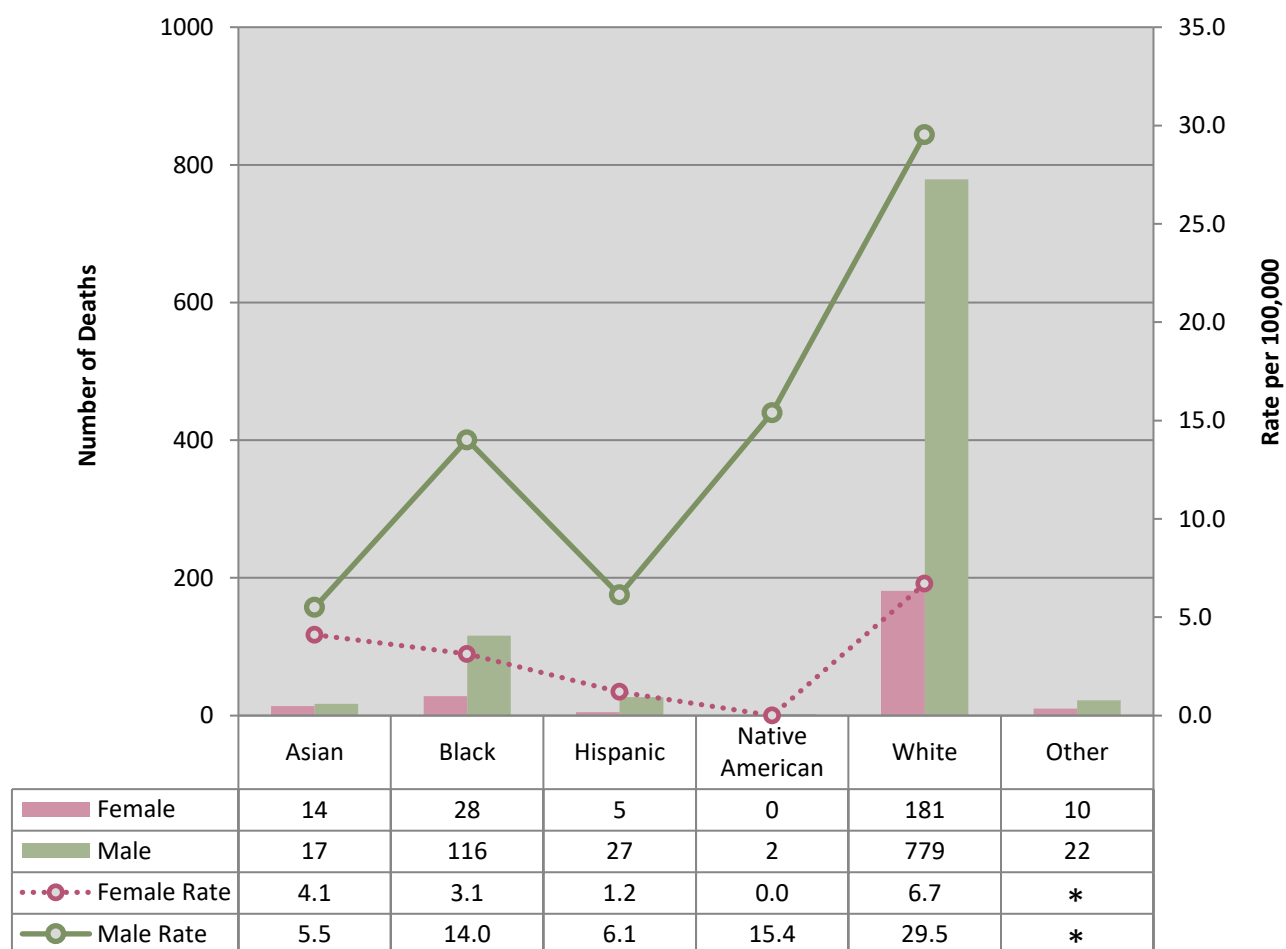
Figure 2.22 Number and Rate of Suicide Deaths by Age Group and Gender, 2021**Figure 2.23 Percentage of Suicide Deaths by Race/Ethnicity, 2021**

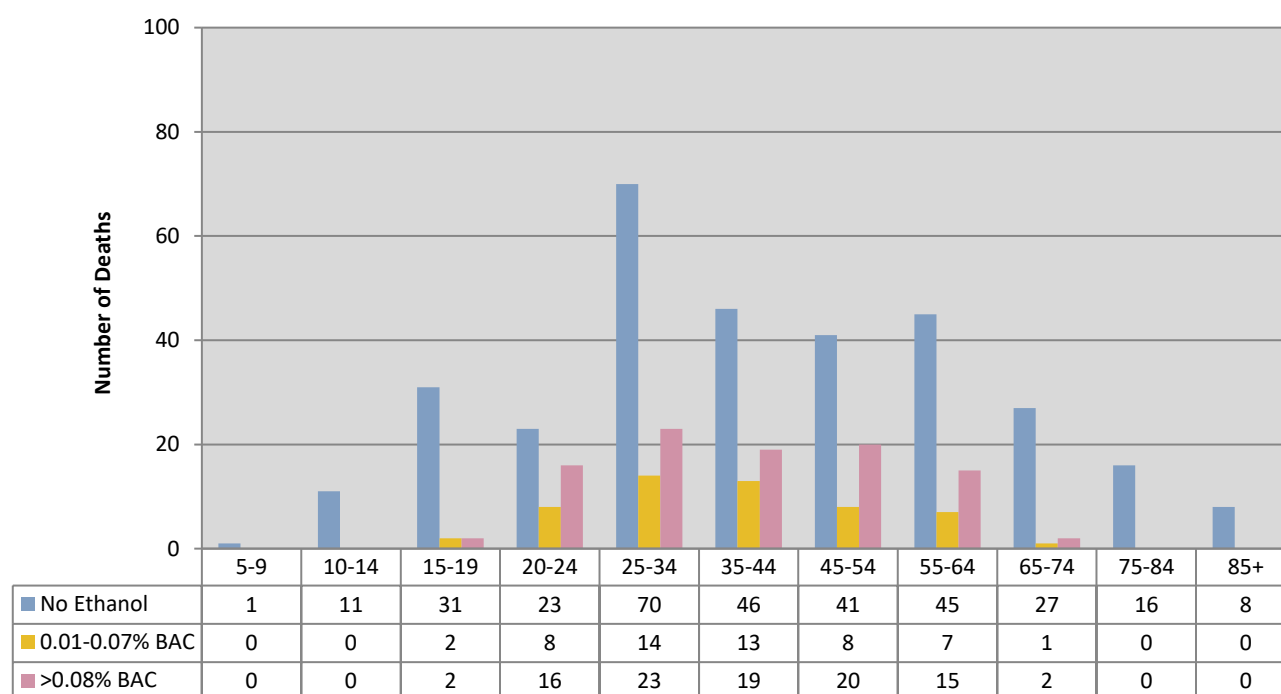
Figure 2.24 Number and Rate of Suicide Deaths by Race/Ethnicity and Gender, 2021

*No rate can be calculated

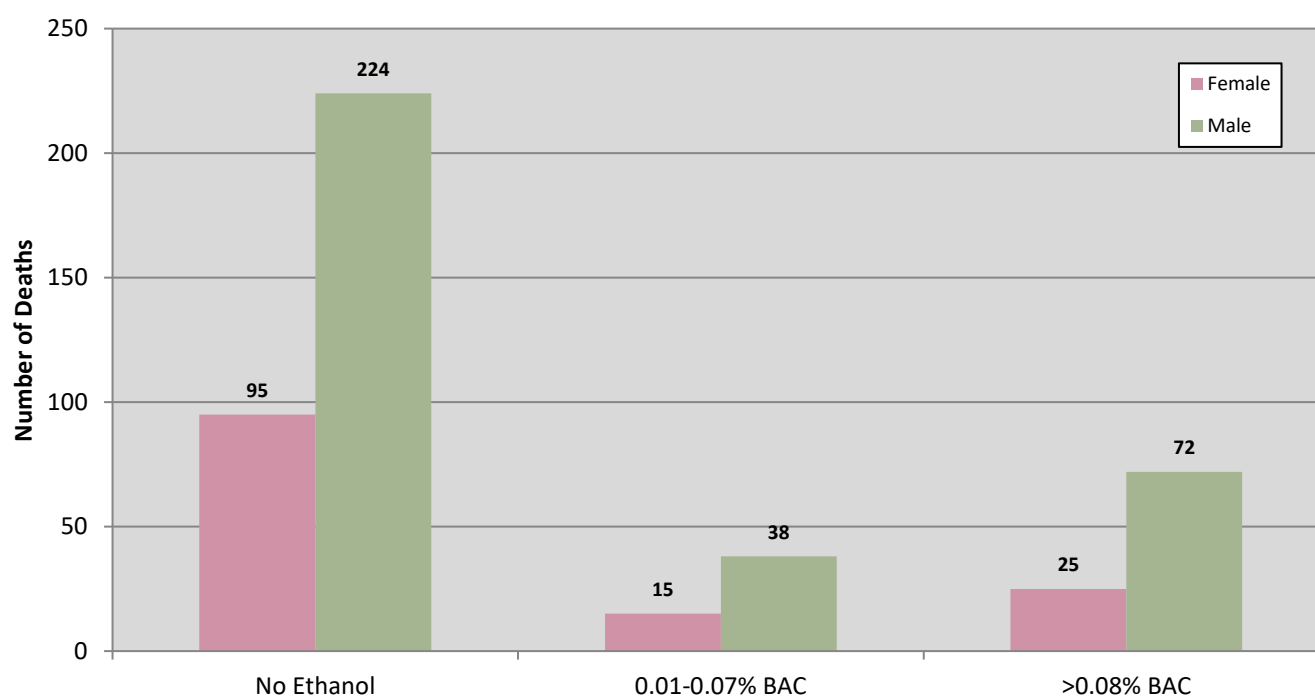
Note: Rates calculated from small case counts (n<5) are considered unreliable and should be interpreted with caution (Native American males)

Table 2.14 Number of Suicide Deaths by Cause and Method of Death, 2021

Method of Death	Autopsied	Total Cases
Asphyxia		
Carbon monoxide (CO) poisoning-motor vehicle exhaust	0	5
Carbon monoxide (CO) poisoning-other	0	4
Choked on food or foreign object	0	1
Drowned	8	9
Hanged	49	243
Helium asphyxia	0	2
Oxygen depletion or replacement	1	4
Plastic bag asphyxia	2	9
Strangled/Neck compression	1	2
Suffocated/Smothered	1	2
Other asphyxia	2	4
Drug Use		
Ingested ethylene glycol	0	1
Ingested and/or injected illicit, prescription, and/or other type of drug	37	118
Other poisoning (e.g. heavy metals, detergent suicide)	6	8
Fire		
Thermal and/or inhalational Injuries	2	6
Jump/Fall		
Jumped/Fell from height	7	22
Traumatic Injury		
Cut/Stabbed self	16	32
Gunshot wound		
Handgun	572	610
Rifle	46	48
Shotgun	55	56
Unknown	3	3
Other traumatic injury	1	2
Vehicular		
Car	0	5
Train	1	4
Unknown	1	1
TOTAL SUICIDE DEATHS	811	1201

Figure 2.25 Number of Suicide Deaths by Age Group and Ethanol Level (N=469), 2021

Note: Of the 1,201 suicides, 60.9% (n=732) did not receive toxicology testing

Figure 2.26 Number of Suicide Deaths by Gender and Ethanol Level (N=469), 2021

Note: Of the 1,201 suicides, 60.9% (n=732) did not receive toxicology testing

Table 2.15 Number of Suicide Deaths by Method of Death and Ethanol Level (N=469), 2021

Method of Death	No Ethanol	0.01-0.07% BAC	>0.08% BAC	Total
Asphyxia				
Carbon monoxide (CO) poisoning-motor vehicle exhaust	3	2	0	5
Carbon monoxide (CO) poisoning-other	3	1	0	4
Choked on food or foreign object	0	0	0	0
Drowned	6	1	1	8
Hanged	62	8	12	82
Helium asphyxia	1	1	0	2
Oxygen depletion or replacement	2	1	0	3
Plastic bag asphyxia	5	1	1	7
Strangled/Neck compression	1	0	0	1
Suffocated/Smothered	1	0	0	1
Other asphyxia	4	0	0	4
Drug Use				0
Ingested ethylene glycol	1	0	0	1
Ingested and/or injected illicit, prescription, and/or other type of drug	83	15	16	114
Other poisoning (e.g. heavy metals, detergent suicide)	7	0	0	7
Fire				0
Thermal and/or inhalational Injuries	3	1	0	4
Jump/Fall				0
Jumped/Fell from height	10	4	3	17
Traumatic Injury				0
Cut/Stabbed self	15	1	1	17
Gunshot wound				0
Handgun	89	14	57	160
Rifle	7	0	3	10
Shotgun	9	2	1	12
Unknown	1	0	0	1
Other traumatic injury	0	0	0	0
Vehicular				0
Car	4	0	0	4
Train	1	1	2	4
Unknown	1	0	0	1
TOTAL SUICIDE DEATHS	319	53	97	469

Note: Of the 1,201 suicides, 60.9% (n=732) did not receive toxicology testing

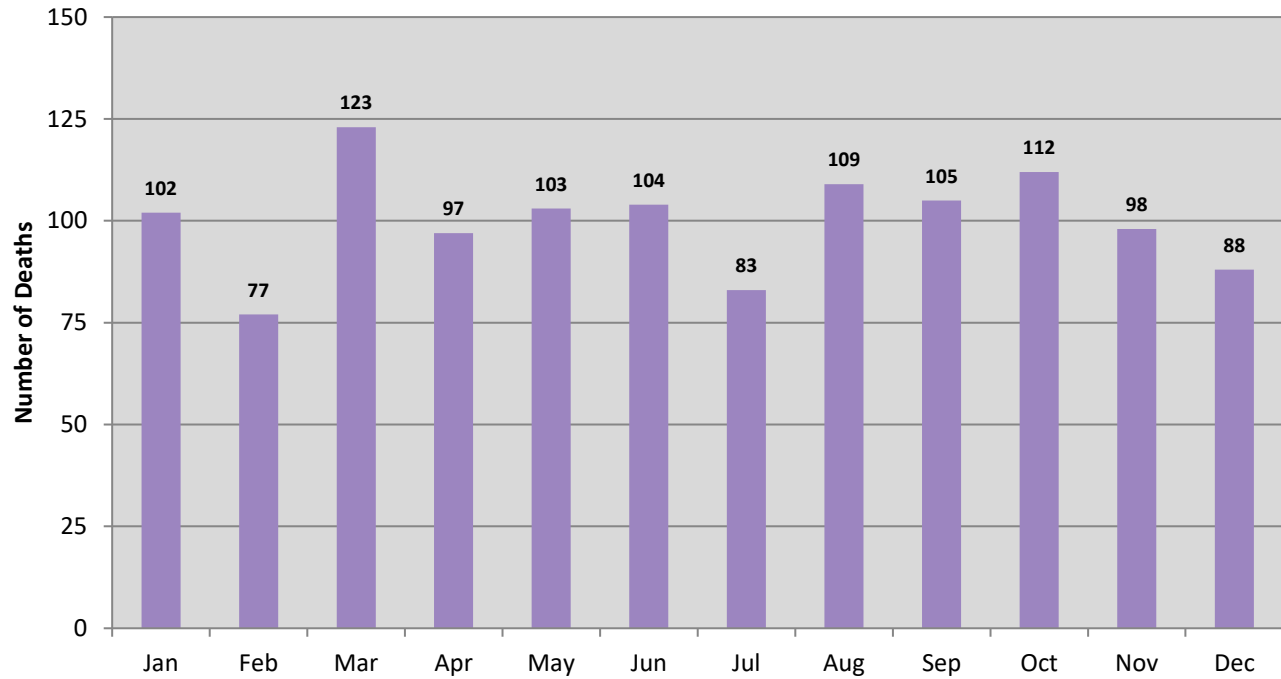
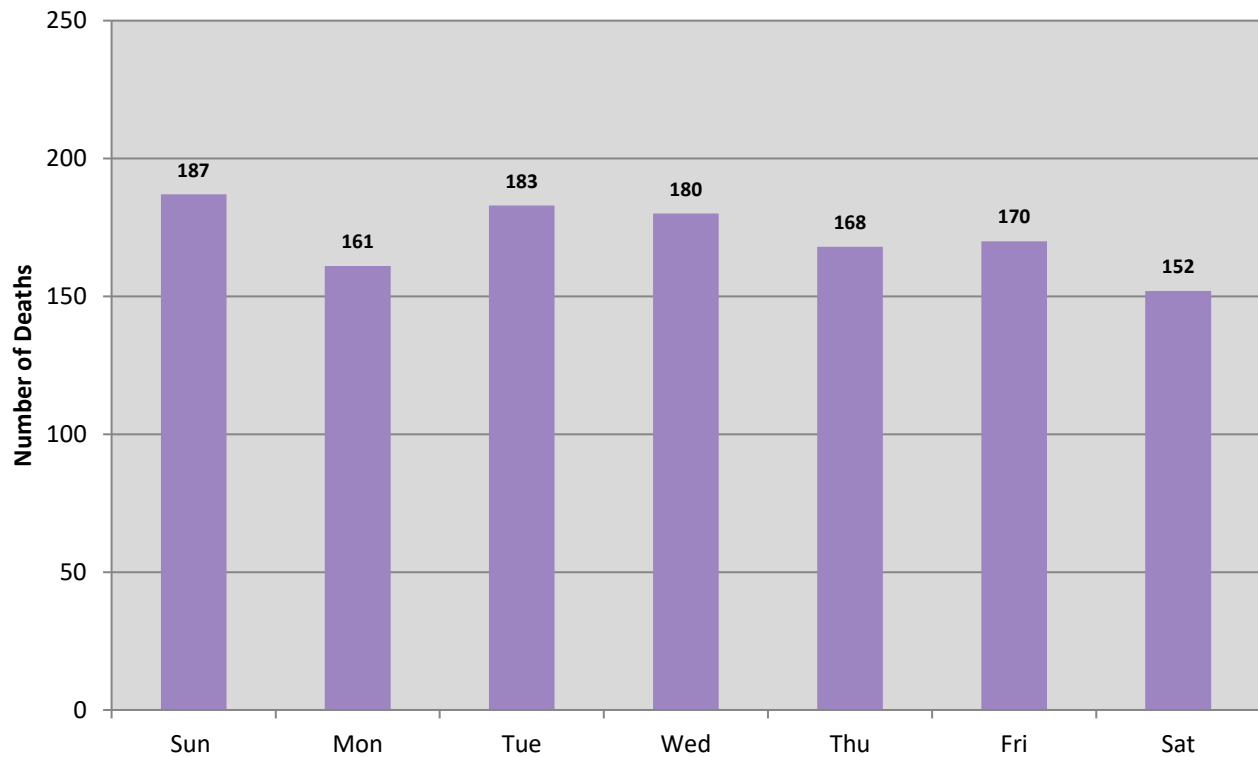
Figure 2.27 Number of Suicide Deaths by Month of Death, 2021**Figure 2.28 Number of Suicide Deaths by Day of the Week, 2021**

Table 2.16 Number and Rate of Suicide Deaths by Locality of Residence, 2021

Locality of Residence	Deaths	Rate
Accomack County	6	18.6
Albemarle County	22	19.9
Alexandria City	11	6.9
Alleghany County	7	47.6
Amelia County	3	23.1
Amherst County	7	22.1
Appomattox County	3	18.7
Arlington County	12	5.0
Augusta County	16	20.9
Bath County	0	0.0
Bedford County	17	21.3
Bland County	0	0.0
Botetourt County	3	8.9
Bristol City	2	11.5
Brunswick County	3	18.7
Buchanan County	1	4.9
Buckingham County	5	29.1
Buena Vista City	0	0.0
Campbell County	8	14.5
Caroline County	6	19.4
Carroll County	8	26.6
Charles City County	1	14.7
Charlotte County	6	50.8
Charlottesville City	2	4.3
Chesapeake City	36	14.6
Chesterfield County	56	15.6
Clarke County	1	6.8
Colonial Heights City	1	5.8
Covington City	0	0.0
Craig County	2	39.4
Culpeper County	5	9.3
Cumberland County	1	10.1
Danville City	7	17.6
Dickenson County	6	42.6
Dinwiddie County	2	7.0
Emporia City	2	38.0
Essex County	3	27.4
Fairfax City	3	12.8
Fairfax County	93	8.1
Falls Church City	0	0.0
Fauquier County	9	12.6
Floyd County	3	19.0
Fluvanna County	2	7.3

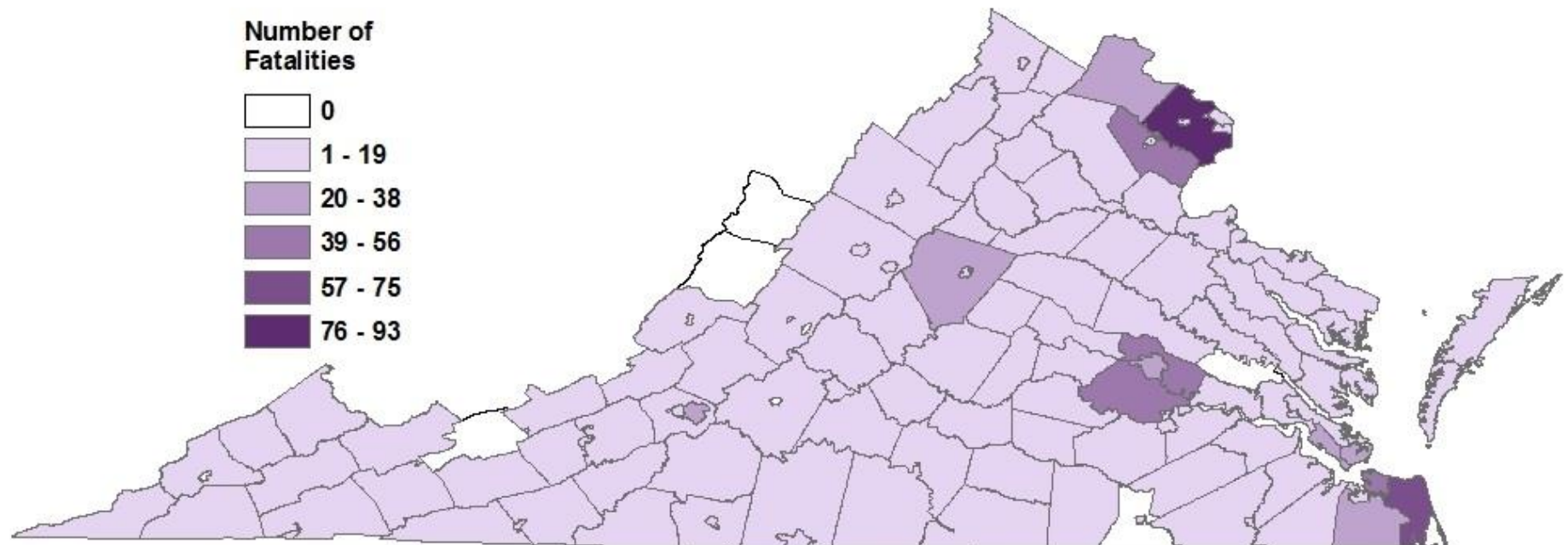
Locality of Residence	Deaths	Rate
Franklin City	1	12.8
Franklin County	4	7.1
Frederick County	17	18.7
Fredericksburg City	4	13.6
Galax City	3	47.6
Giles County	5	30.0
Gloucester County	4	10.7
Goochland County	6	24.6
Grayson County	3	19.4
Greene County	3	14.9
Greensville County	0	0.0
Halifax County	5	14.9
Hampton City	20	14.8
Hanover County	18	16.6
Harrisonburg City	8	15.0
Henrico County	40	12.0
Henry County	10	19.9
Highland County	0	0.0
Hopewell City	3	13.4
Isle of Wight County	9	23.9
James City County	14	18.0
King and Queen County	3	43.2
King George County	1	3.7
King William County	3	17.0
Lancaster County	2	18.8
Lee County	2	8.6
Lexington City	0	0.0
Loudoun County	30	7.1
Louisa County	1	2.6
Lunenburg County	5	40.8
Lynchburg City	4	4.9
Madison County	2	15.0
Manassas City	1	2.4
Manassas Park	0	0.0
Martinsville City	2	16.2
Mathews County	3	34.2
Mecklenburg County	7	22.8
Middlesex County	4	37.8
Montgomery County	17	17.3
Nelson County	2	13.6
New Kent County	0	0.0
Newport News City	23	12.8
Norfolk City	39	16.1

Locality of Residence	Deaths	Rate
Northampton County	2	17.1
Northumberland County	3	24.9
Norton City	0	0.0
Nottoway County	3	19.8
Orange County	7	18.6
Page County	6	25.1
Patrick County	5	28.6
Petersburg City	4	13.1
Pittsylvania County	14	23.4
Poquoson City	3	24.5
Portsmouth City	10	10.5
Powhatan County	7	23.2
Prince Edward County	3	13.0
Prince George County	5	12.9
Prince William County	54	11.4
Pulaski County	9	26.5
Radford City	2	11.0
Rappahannock County	1	13.8
Richmond City	35	15.1
Richmond County	1	11.0
Roanoke City	22	22.2
Roanoke County	18	19.0
Rockbridge County	4	17.6
Rockingham County	14	17.0
Russell County	2	7.5
Salem City	5	19.7

Locality of Residence	Deaths	Rate
Scott County	2	9.2
Shenandoah County	9	20.5
Smyth County	5	16.6
Southampton County	6	34.0
Spotsylvania County	15	10.8
Stafford County	16	10.2
Staunton City	5	19.8
Suffolk City	11	11.7
Surry County	2	31.3
Sussex County	1	9.2
Tazewell County	4	9.9
Virginia Beach City	65	14.4
Warren County	8	19.8
Washington County	10	18.6
Waynesboro City	5	22.0
Westmoreland County	1	5.5
Williamsburg City	4	26.2
Winchester City	2	7.2
Wise County	8	21.5
Wythe County	7	24.5
York County	4	5.8
<i>Subtotal (in-state)</i>	1138	13.2
Out of State	60	ND
Unknown	3	ND
<i>Subtotal (out-of-state)</i>	63	ND
TOTAL	1201	14.0

Note: No denominator is represented by ND

Map 2.5 Number of Suicides by Locality of Residence, 2021



Map 2.6 Suicide Rates by Locality of Residence, 2021

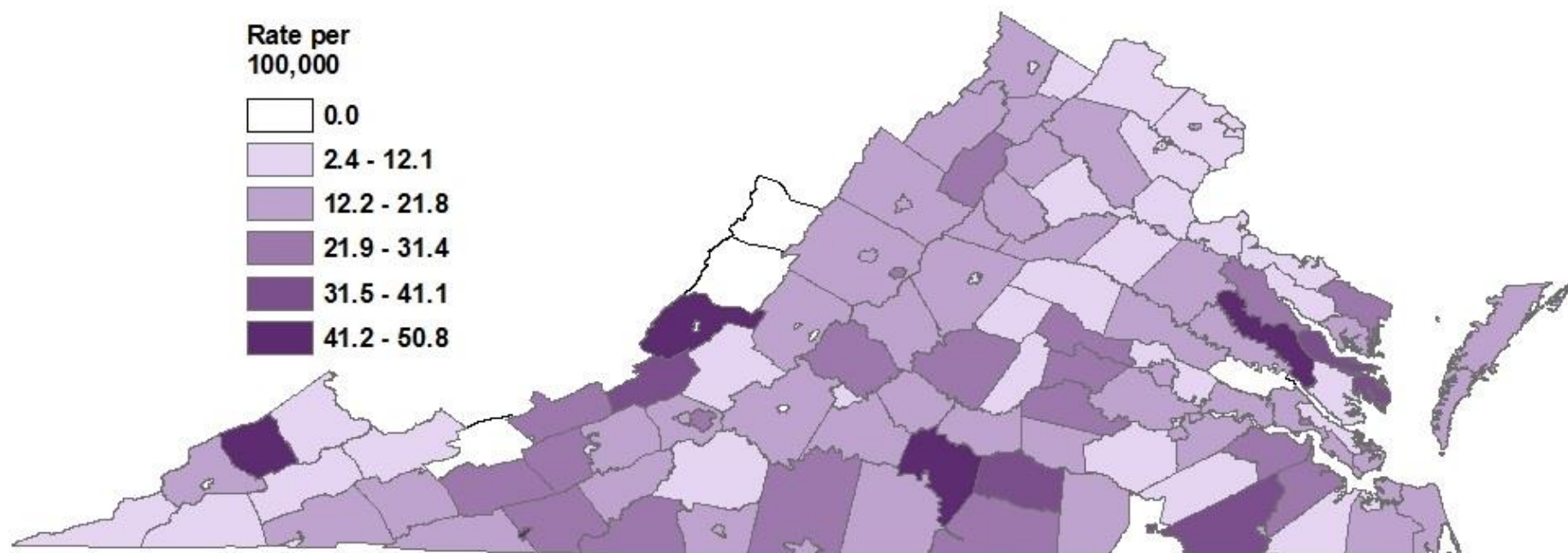


Table 2.17 Number of Suicide Deaths by Locality of Injury and Year of Death, 2006-2021

Locality of Injury	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	Total
Accomack County	4	2	1	4	6	6	1	4	4	9	4	5	4	8	5	6	73
Albemarle County	2	6	8	13	6	11	10	12	15	11	7	12	14	13	20	21	181
Alexandria City	12	11	13	14	14	14	10	16	15	10	16	18	10	9	16	11	209
Alleghany County	3	2	0	4	6	5	4	1	2	3	5	0	3	4	3	6	51
Amelia County	2	1	1	3	1	4	6	1	5	6	2	2	2	4	2	3	45
Amherst County	4	6	6	7	7	4	7	2	10	2	6	5	10	6	10	7	99
Appomattox County	2	0	0	3	3	2	2	1	2	8	2	1	3	3	4	2	38
Arlington County	14	12	28	10	21	16	16	18	18	11	18	21	10	18	13	12	256
Augusta County	12	11	13	16	11	14	16	20	20	15	15	17	16	16	19	16	247
Bath County	1	0	1	0	0	1	1	2	2	2	0	0	4	1	1	0	16
Bedford City	1	1	1	2	2	0	1	3	0	0	0	0	0	0	0	0	11
Bedford County	7	6	9	14	14	13	8	10	10	15	12	20	15	15	18	21	207
Bland County	2	1	0	3	1	1	1	1	3	2	2	1	1	2	2	0	23
Botetourt County	3	4	3	5	2	6	5	7	1	9	7	6	6	8	7	4	83
Bristol City	4	4	1	2	3	3	1	1	5	0	2	1	2	3	4	3	39
Brunswick County	2	2	1	1	3	1	1	2	2	2	3	4	4	1	2	3	34
Buchanan County	5	6	7	7	10	1	5	4	3	5	5	4	7	6	5	1	81
Buckingham County	3	3	5	1	3	2	2	4	2	2	3	2	3	6	2	4	47
Buena Vista City	0	0	1	1	1	0	0	1	0	0	0	2	0	1	1	0	8
Campbell County	6	3	7	6	6	10	9	13	8	12	7	5	12	7	13	8	132
Caroline County	3	6	3	3	5	2	2	8	12	4	6	8	6	6	7	8	89
Carroll County	6	8	6	10	9	7	6	8	6	8	5	10	4	8	4	9	114
Charles City County	0	0	2	2	2	3	7	1	2	2	2	1	1	1	1	3	30
Charlotte County	3	2	1	3	2	3	1	3	1	3	1	3	4	1	2	5	38
Charlottesville City	11	7	5	4	3	1	7	5	6	5	4	5	9	5	5	5	87
Chesapeake City	19	20	18	25	25	24	26	26	31	36	29	27	31	39	27	38	441
Chesterfield County	29	25	32	32	34	40	39	46	49	31	51	48	48	57	52	57	670
Clarke County	2	1	3	3	3	5	0	1	3	8	2	8	4	2	3	1	49
Colonial Heights City	1	2	3	1	2	1	6	2	6	4	6	6	4	4	2	2	52
Covington City	2	2	1	0	0	2	2	2	1	2	1	3	2	1	2	0	23
Craig County	0	1	2	4	0	2	1	4	0	2	4	1	1	0	4	3	29

Locality of Injury	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	Total
Culpeper County	6	10	2	11	5	7	9	5	9	9	5	10	11	4	2	5	110
Cumberland County	0	1	2	2	0	3	1	3	1	0	1	0	3	1	2	0	20
Danville City	7	3	4	8	7	6	4	5	9	3	9	6	8	5	6	9	99
Dickenson County	2	5	5	8	7	5	7	7	7	4	6	4	5	4	4	7	87
Dinwiddie County	3	3	1	1	7	3	2	1	3	7	4	5	3	4	8	1	56
Emporia City	3	0	2	1	1	0	0	0	0	0	0	0	2	0	1	2	12
Essex County	0	1	3	2	3	2	3	2	5	0	1	0	1	3	2	3	31
Fairfax City	2	2	1	6	4	2	2	4	3	7	1	5	2	6	1	2	50
Fairfax County	85	87	88	104	87	90	98	109	107	85	93	90	103	99	98	94	1517
Falls Church City	0	1	3	0	1	0	2	1	0	0	1	2	3	0	2	0	16
Fauquier County	7	4	8	9	14	14	13	16	9	10	9	16	6	9	13	12	169
Floyd County	2	2	1	3	4	4	5	5	6	3	0	1	8	2	4	3	53
Fluvanna County	2	3	4	2	2	3	5	6	2	1	1	5	3	5	4	2	50
Franklin City	0	0	0	0	1	0	1	1	2	0	0	2	0	0	1	1	9
Franklin County	5	8	6	7	3	10	11	12	6	10	8	9	5	7	15	8	130
Frederick County	9	7	7	8	8	14	19	12	20	14	13	17	12	19	12	15	206
Fredericksburg City	6	4	5	2	4	5	3	2	3	9	1	3	5	4	8	3	67
Galax City	1	1	2	1	3	3	1	0	1	2	0	2	1	2	4	3	27
Giles County	2	3	3	5	3	4	2	3	2	1	4	3	4	2	6	6	53
Gloucester County	7	6	9	4	8	12	9	4	4	14	10	6	8	6	3	5	115
Goochland County	2	5	2	4	2	0	1	6	4	7	8	4	3	4	9	8	69
Grayson County	3	2	5	2	2	8	5	2	4	1	4	2	5	1	1	4	51
Greene County	4	2	2	3	4	3	1	1	2	1	4	4	4	3	3	4	45
Greensville County	2	0	0	2	2	4	1	4	1	0	0	4	5	2	0	1	28
Halifax County	8	4	4	5	5	4	6	3	6	7	7	4	5	4	5	5	82
Hampton City	13	16	18	16	9	7	13	17	18	15	19	13	11	18	16	22	241
Hanover County	12	15	17	11	6	15	23	21	16	13	14	13	18	23	22	16	255
Harrisonburg City	2	4	4	6	6	2	1	4	6	5	8	6	6	4	5	11	80
Henrico County	37	25	25	39	30	42	31	41	36	36	31	45	32	38	48	43	579
Henry County	11	12	19	13	16	10	9	9	10	10	10	8	11	10	12	10	180
Highland County	0	0	0	0	1	1	1	2	1	2	2	0	0	0	1	0	11

Locality of Injury	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	Total
Hopewell City	1	2	2	3	3	2	3	4	5	4	5	4	5	9	7	3	62
Isle of Wight County	5	1	0	3	2	4	6	4	5	7	7	7	8	8	5	10	82
James City County	5	4	9	7	9	6	10	4	12	11	9	7	11	11	8	12	135
King and Queen County	2	4	2	1	1	1	3	0	1	1	2	1	3	2	2	3	29
King George County	3	2	2	3	6	3	4	8	5	3	6	3	8	2	5	0	63
King William County	1	1	1	4	0	2	7	2	3	5	5	3	1	5	1	5	46
Lancaster County	0	3	4	1	2	2	4	2	2	4	4	3	1	4	3	2	41
Lee County	5	4	7	5	2	5	9	4	5	7	3	7	6	6	6	2	83
Lexington City	0	1	0	0	0	0	1	1	1	2	4	1	1	0	1	0	13
Loudoun County	20	23	13	24	20	35	35	34	34	36	45	41	36	35	30	35	496
Louisa County	5	8	2	5	9	7	3	3	2	5	7	4	8	12	6	1	87
Lunenburg County	6	1	1	3	1	2	3	2	2	3	4	4	0	1	3	4	40
Lynchburg City	8	6	13	5	9	10	6	4	7	10	7	14	16	6	9	5	135
Madison County	2	4	3	1	3	1	4	1	4	6	4	0	5	6	1	3	48
Manassas	2	3	8	3	1	4	5	2	6	4	4	4	2	2	2	1	53
Manassas Park	Unknown	1	1	0	1	1	0	4	4	1	1	0	0	2	0	0	16
Martinsville City	0	4	0	1	1	4	1	3	2	2	0	3	2	3	1	2	29
Mathews County	1	0	2	0	1	2	1	1	3	2	3	3	2	0	1	3	25
Mecklenburg County	4	6	7	5	8	4	4	4	3	6	7	7	7	6	5	9	92
Middlesex County	0	1	1	5	1	3	3	4	0	3	1	5	2	2	6	3	40
Montgomery County	11	22	8	5	9	14	8	7	11	10	17	15	14	17	15	18	201
Nelson County	2	1	3	4	4	3	3	4	3	2	2	4	1	5	5	1	47
New Kent County	3	2	2	3	1	6	5	3	5	4	5	3	4	2	2	1	51
Newport News City	11	15	18	14	20	23	29	19	25	22	30	23	25	24	31	28	357
Norfolk City	27	33	29	22	29	28	29	30	34	23	26	35	35	39	40	43	502
Northampton County	0	4	1	0	1	5	0	2	3	3	2	3	1	4	1	2	32
Northumberland County	1	3	2	0	4	3	0	0	1	2	2	2	1	4	2	2	29
Norton City	0	0	2	1	0	1	1	0	0	0	1	1	2	0	1	0	10
Nottoway County	1	0	4	4	3	3	2	1	5	4	1	3	3	2	3	2	41
Orange County	6	4	5	2	4	5	12	6	9	10	6	7	4	4	6	5	95

Locality of Injury	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	Total
Page County	6	5	7	3	4	8	4	5	11	5	6	4	4	3	7	7	89
Patrick County	3	4	4	4	7	4	5	9	5	6	5	3	4	6	8	3	80
Petersburg City	1	4	7	3	4	3	4	2	6	5	8	4	1	5	7	4	68
Pittsylvania County	13	9	6	13	9	9	12	16	5	10	14	14	20	13	14	13	190
Poquoson City	1	1	1	0	0	0	0	2	1	0	2	2	2	3	1	2	18
Portsmouth City	8	14	10	11	16	8	20	9	13	16	16	14	16	15	18	8	212
Powhatan County	5	1	4	2	8	6	5	4	6	6	4	5	2	3	5	8	74
Prince Edward County	3	3	1	5	3	3	4	3	4	4	2	4	5	3	2	6	55
Prince George County	6	7	7	7	5	4	2	5	8	6	7	8	7	7	5	6	97
Prince William County	32	28	34	41	41	28	33	37	38	30	47	39	50	33	33	48	592
Pulaski County	11	10	2	6	9	9	6	7	1	8	12	9	7	5	7	12	121
Radford City	1	0	2	0	2	1	1	5	2	1	2	1	2	1	1	3	25
Rappahannock County	0	4	3	1	3	2	5	0	2	2	1	1	1	4	3	1	33
Richmond City	32	25	22	35	21	32	25	27	23	25	30	30	31	31	33	32	454
Richmond County	1	1	4	0	2	1	1	1	0	1	4	0	2	2	0	0	20
Roanoke City	10	15	19	13	18	19	25	16	21	16	17	22	28	17	18	24	298
Roanoke County	11	7	19	9	20	14	13	12	17	14	16	12	24	9	10	15	222
Rockbridge County	5	4	6	5	5	6	3	3	7	4	4	6	5	4	13	5	85
Rockingham County	9	10	9	4	12	10	9	10	10	21	14	14	11	15	14	15	187
Russell County	5	4	10	7	5	6	6	6	4	4	7	4	1	7	7	3	86
Salem City	4	7	5	0	2	6	6	6	9	7	7	6	3	3	6	6	83
Scott County	3	12	5	4	5	6	5	4	2	4	7	7	6	8	9	4	91
Shenandoah County	7	5	8	8	5	9	7	7	8	10	15	10	6	10	10	9	134
Smyth County	3	11	5	3	3	6	7	10	6	5	4	6	7	3	11	7	97
Southampton County	4	1	4	3	4	2	2	2	1	2	2	3	3	4	3	6	46
Spotsylvania County	13	18	17	10	22	11	13	15	14	14	26	11	17	19	13	15	248
Stafford County	6	14	15	15	5	9	13	19	11	20	18	15	27	13	26	19	245
Staunton City	4	7	1	6	4	4	1	3	3	2	3	4	3	4	3	5	57
Suffolk City	11	1	10	6	5	14	12	12	14	11	6	10	12	8	7	12	151
Surry County	0	1	0	4	1	0	2	1	0	0	0	2	1	1	1	2	16
Sussex County	1	2	1	4	4	1	1	4	0	2	3	2	3	3	0	1	32

Locality of Injury	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	Total
Tazewell County	11	4	4	12	6	6	8	5	5	14	7	8	8	7	9	7	121
Virginia Beach City	61	49	45	59	63	65	51	49	71	46	61	53	70	55	67	69	934
Warren County	3	12	8	6	5	7	8	7	8	6	10	6	8	12	2	9	117
Washington County	6	10	11	13	10	10	11	9	8	12	14	19	8	10	8	13	172
Waynesboro City	6	3	3	4	2	3	2	4	0	6	3	2	9	6	7	4	64
Westmoreland County	4	2	4	2	2	5	5	3	4	1	4	3	3	3	2	1	48
Williamsburg City	10	2	1	1	8	6	1	0	6	4	2	4	4	3	3	4	59
Winchester City	6	1	7	2	6	5	3	3	9	7	4	4	8	3	4	3	75
Wise County	9	13	8	4	5	9	3	3	8	7	5	15	8	5	8	5	115
Wythe County	4	4	8	5	2	7	4	3	5	9	7	8	10	7	6	6	95
York County	3	8	11	6	11	15	8	7	8	6	4	8	8	9	11	4	127
Subtotal (in-state)	882	897	944	968	989	1055	1049	1055	1133	1086	1151	1154	1202	1149	1204	1195	17113
Out of State	2	6	3	4	4	9	3	5	9	8	4	1	2	4	4	5	73
Unknown	0	0	1	1	1	0	0	1	3	2	2	1	7	6	1	1	27
Subtotal (out-of-state)	2	6	4	5	5	9	3	6	12	10	6	2	9	10	5	6	100
TOTAL	884	903	948	973	994	1064	1052	1061	1145	1096	1157	1156	1211	1159	1209	1201	17213

Note: Bedford City was incorporated into Bedford County in 2014 and therefore, numbers are combined from there forward

UNDETERMINED DEATHS (N=216)

Undetermined deaths are those in which after examination, two or more manners cannot be eliminated and therefore the death must be ruled undetermined. In 2021, the number of undetermined deaths increased 16.1% compared to 2020. Generally, undetermined deaths have increased since 2006 mainly due to the transition in diagnostic criteria of sudden infant death syndrome (SIDS) to sudden unexpected infant death (SUID), where SIDS deaths are classified as natural deaths and SUID deaths are classified as undetermined deaths.

- Over 32% of the cases assigned an undetermined manner had a determined cause of death
- Nearly 39% of deaths with an undetermined manner were among infants less than 1 year of age

Figure 2.29 Number and Rate of Undetermined Deaths by Year of Death, 1999-2021

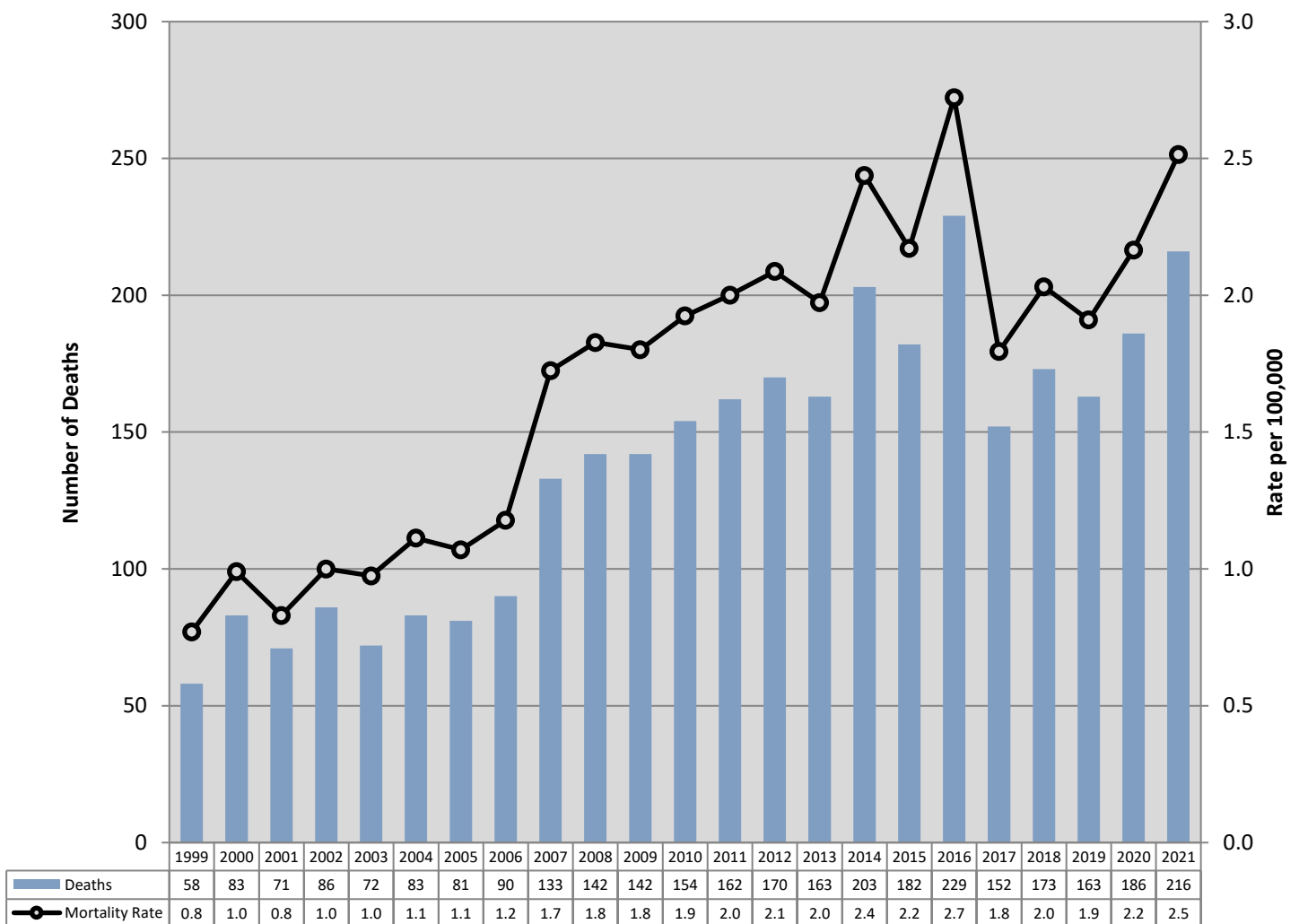
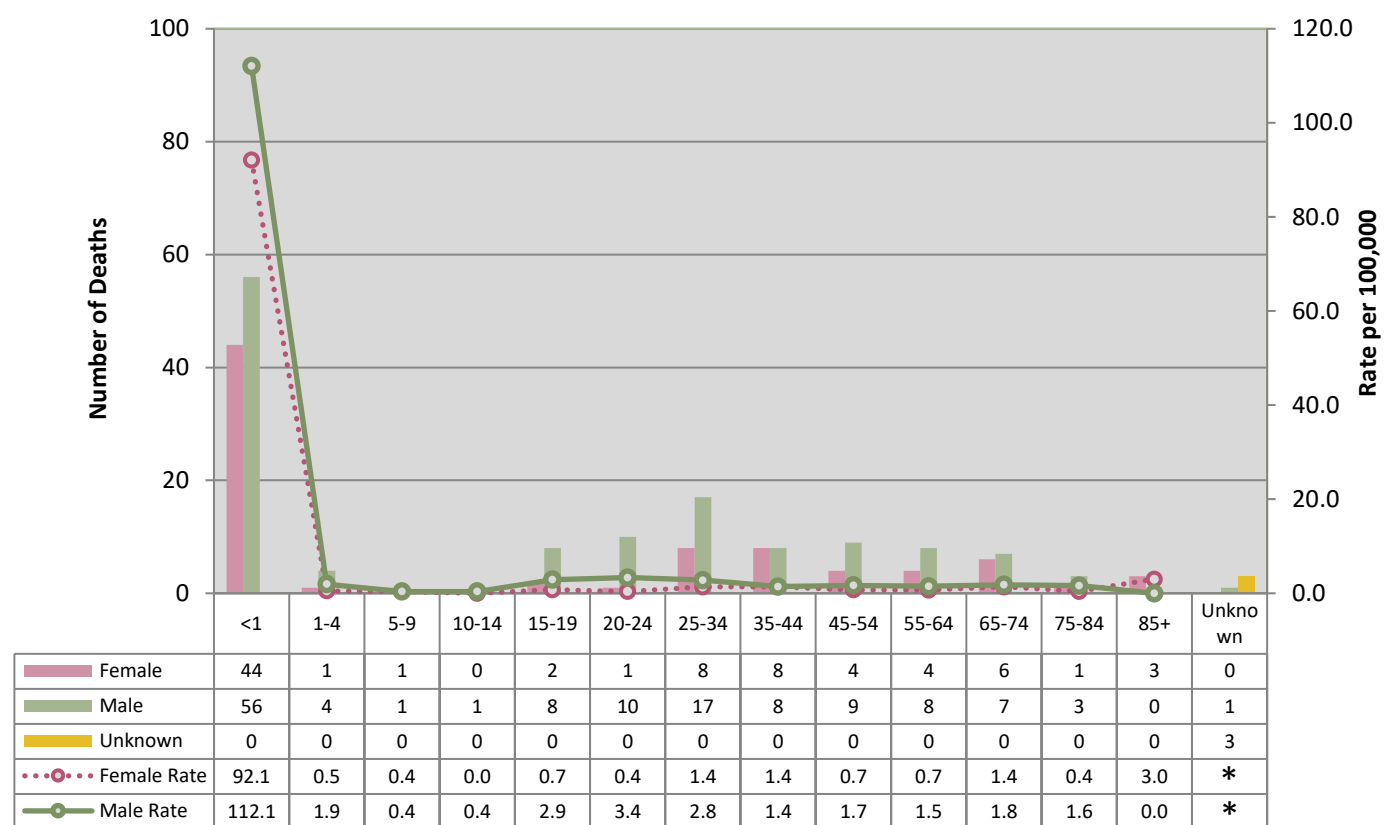


Figure 2.30 Number and Rate of Undetermined Deaths by Age Group and Gender, 2021

*No rate can be calculated

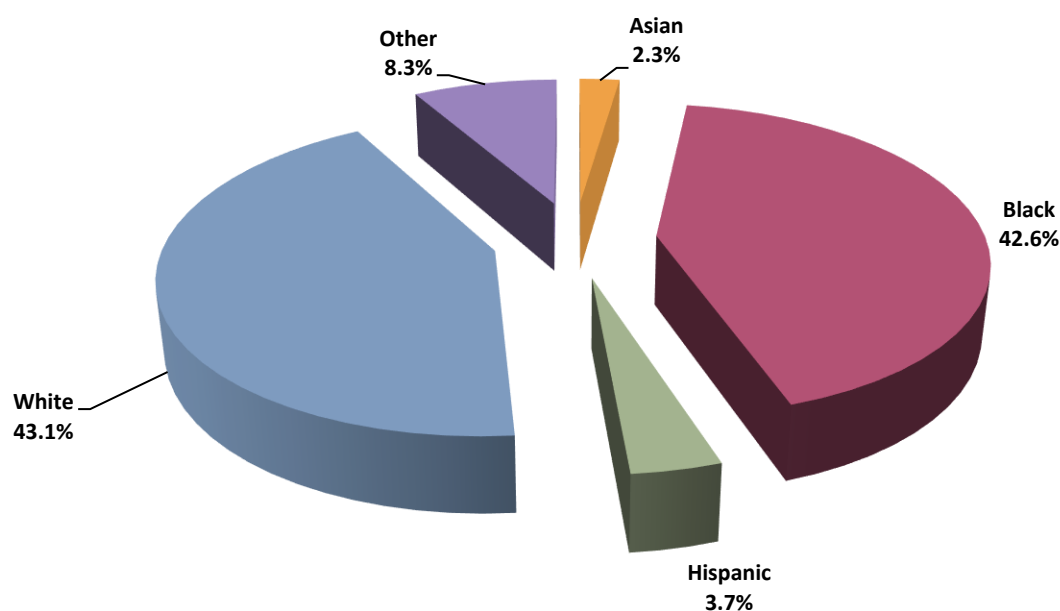
Figure 2.31 Percentage of Undetermined Deaths by Race/Ethnicity, 2021

Table 2.18 Number of Undetermined Deaths by Cause of Death, 2021

Undetermined Manner of Death with Cause of Death Determined	Autopsied	Total Cases
Asphyxia		
Drowned	6	6
Helium	1	1
Oxygen depletion/replacement	1	1
Strangled/Neck compression	1	1
Suffocated/Smothered	1	1
Other asphyxia	1	1
Drug Use		
Ingested and/or injected illicit, prescription, and/or OTC medication	8	8
Fire		
Thermal and/or inhalational Injuries	2	2
Jump/Fall		
Jumped/Fell from height	1	1
Motor Vehicle		
Car	1	1
Pickup truck	2	2
Sport utility vehicle	2	2
Unknown	2	2
Traumatic Injury		
Gunshot wound		
Handgun	16	16
Rifle	1	1
Shotgun	1	1
Unknown	3	3
Sharp force injury	1	1
Other/Unknown traumatic causes	8	9
Other Cause of Death		
Dehydration and/or starvation	1	1
Other	9	9
Subtotal (Undetermined Manner with Determined Cause of Death)	69	70
Undetermined Manner of Death and Undetermined Cause of Death		
Skeletal/Mummified remains	23	23
Sudden Unexpected Infant Death (SUID)	84	84
Undetermined after autopsy and/or toxicology	36	39
Subtotal (Undetermined Manner and Undetermined Cause of Death)	143	146
TOTAL UNDETERMINED DEATHS	212	216

SECTION 3: DEATHS OF CHILDREN (N=382)

Child deaths are deaths of persons aged 17 years and younger.

The OCME investigated 382 deaths of children, representing 4.0% of all OCME deaths in 2021.

- Males represented 62.8% of all child cases
- Undetermined deaths of infants <1 year of age certified as sudden unexpected infant death (SUID) represented 22.0% of all OCME child deaths in 2021

Figure 3.1 Number of Child Deaths by Manner, 2021

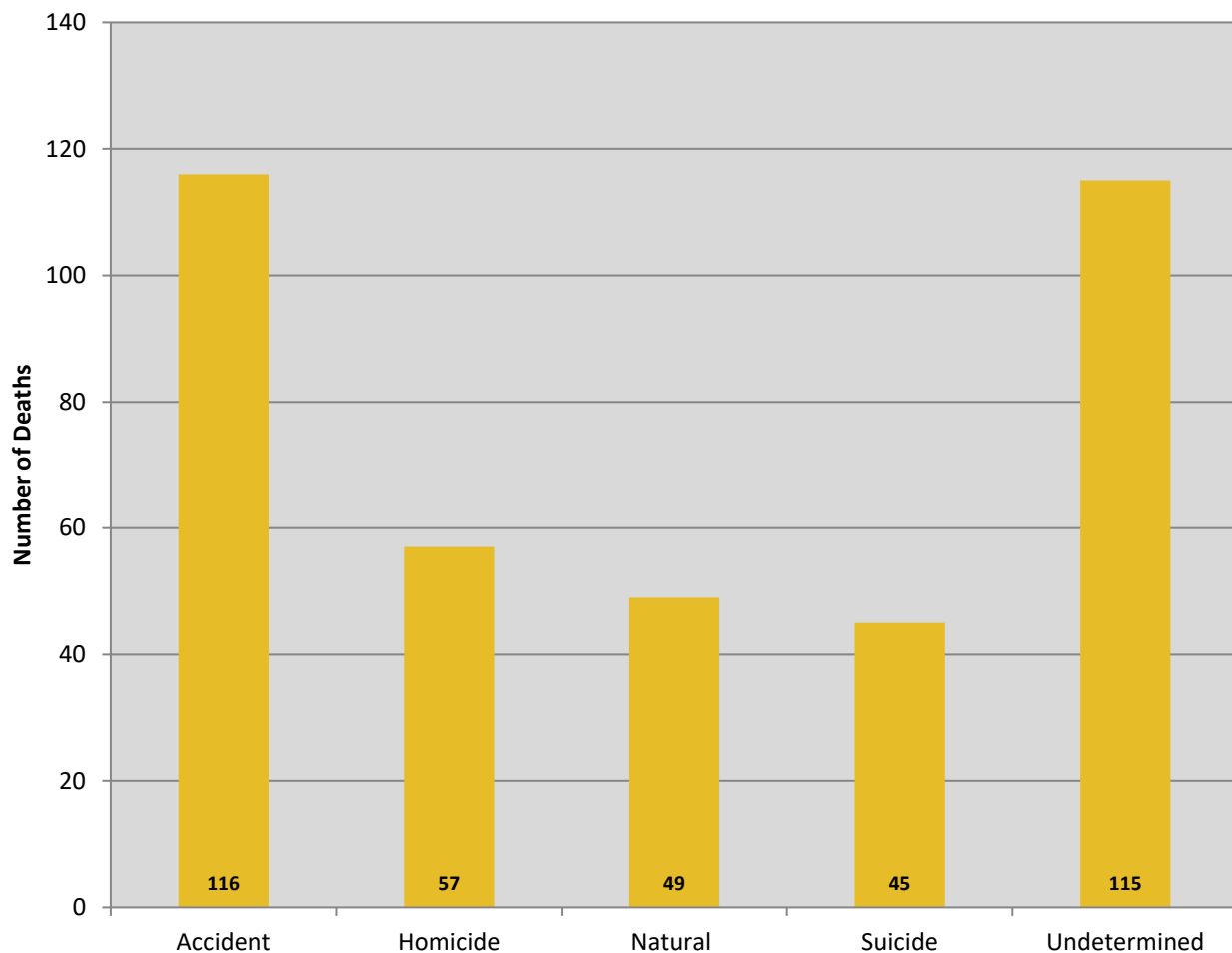


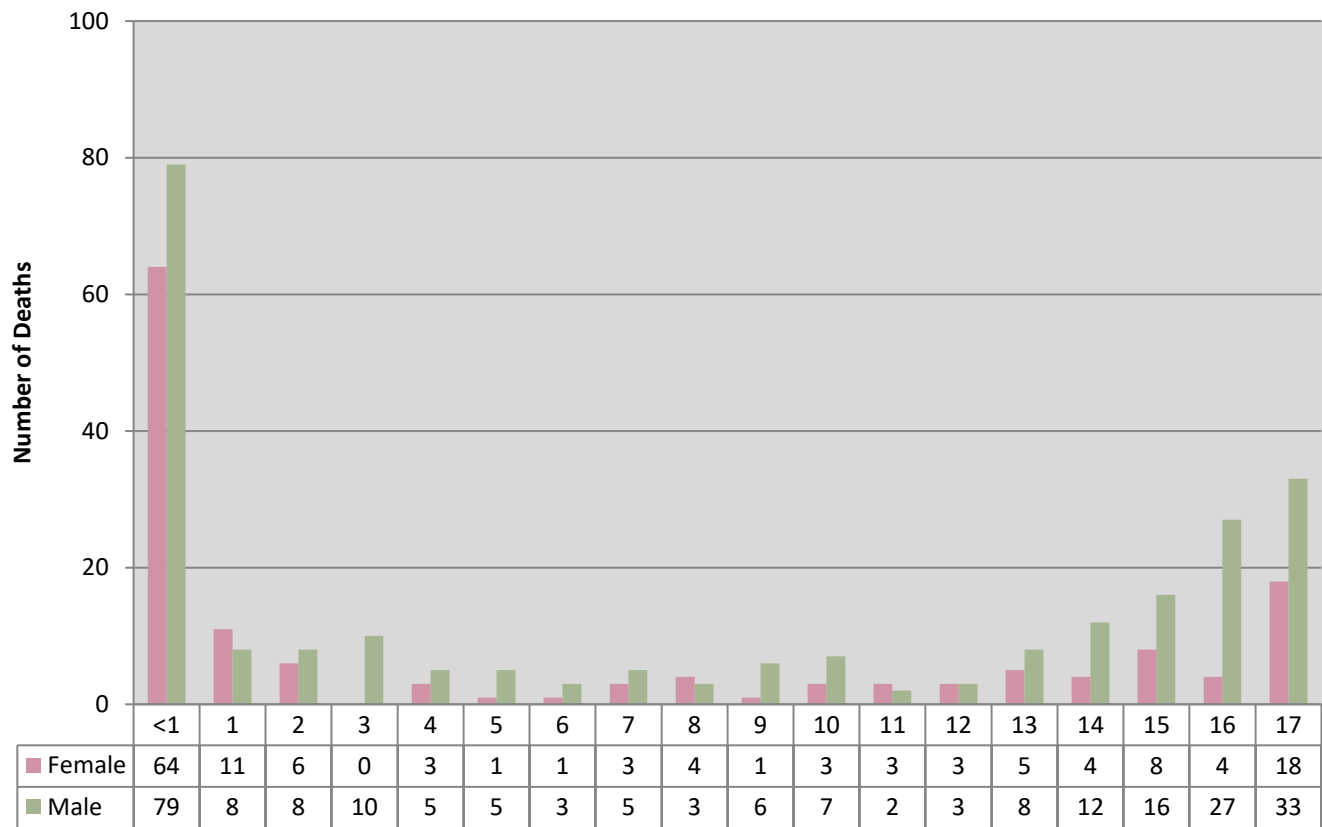
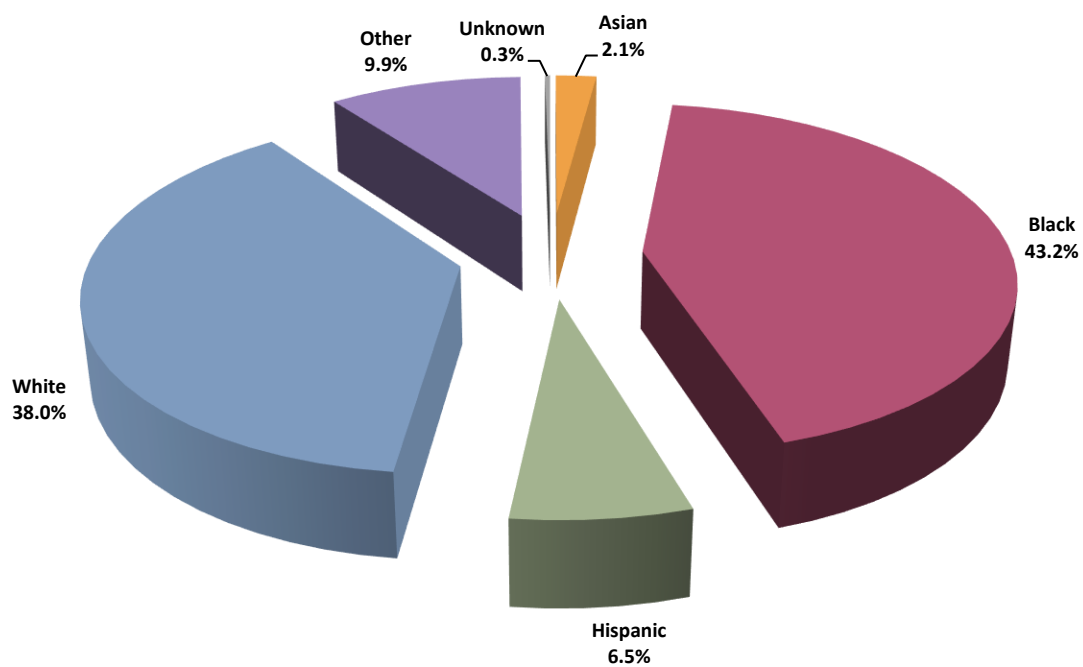
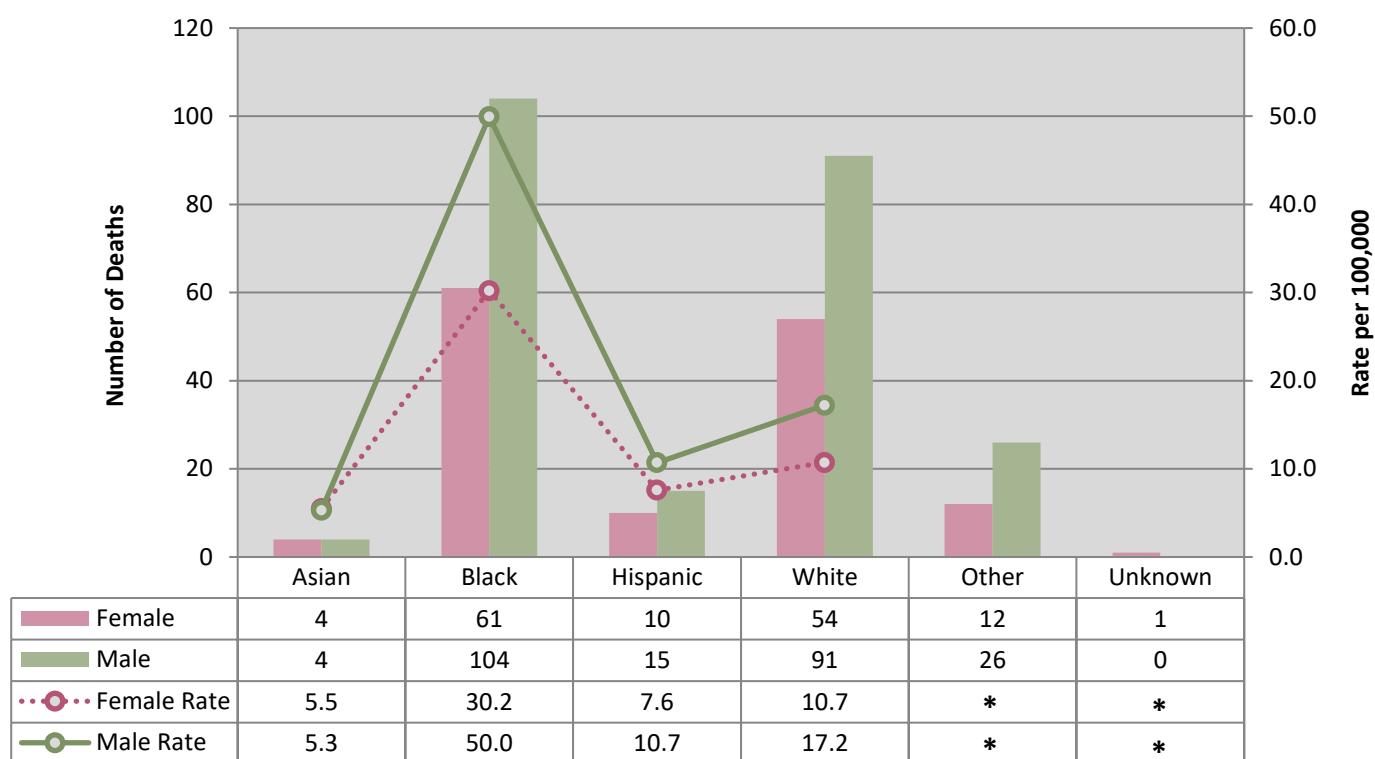
Figure 3.2 Number of Child Deaths by Age and Gender, 2021**Figure 3.3 Percentage of Child Deaths by Race/Ethnicity, 2021**

Figure 3.4 Number and Rate of Child Deaths by Gender and Race/Ethnicity, 2021

*No rate can be calculated

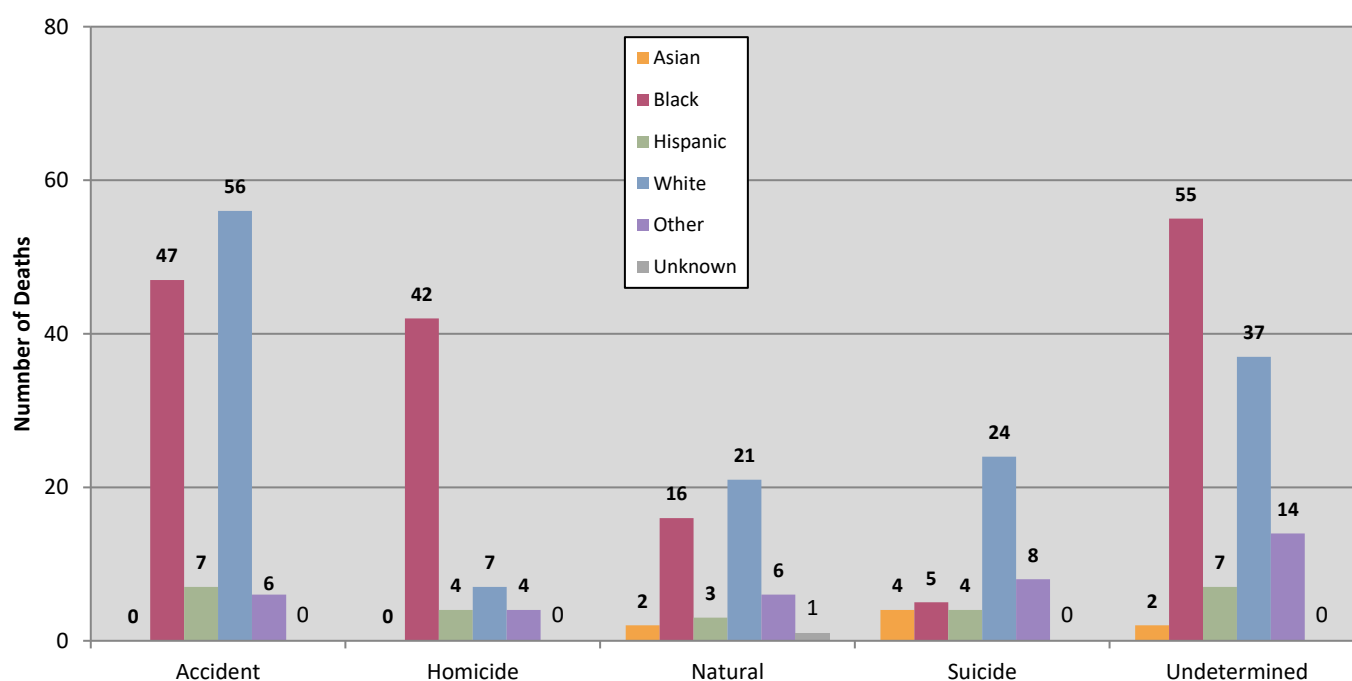
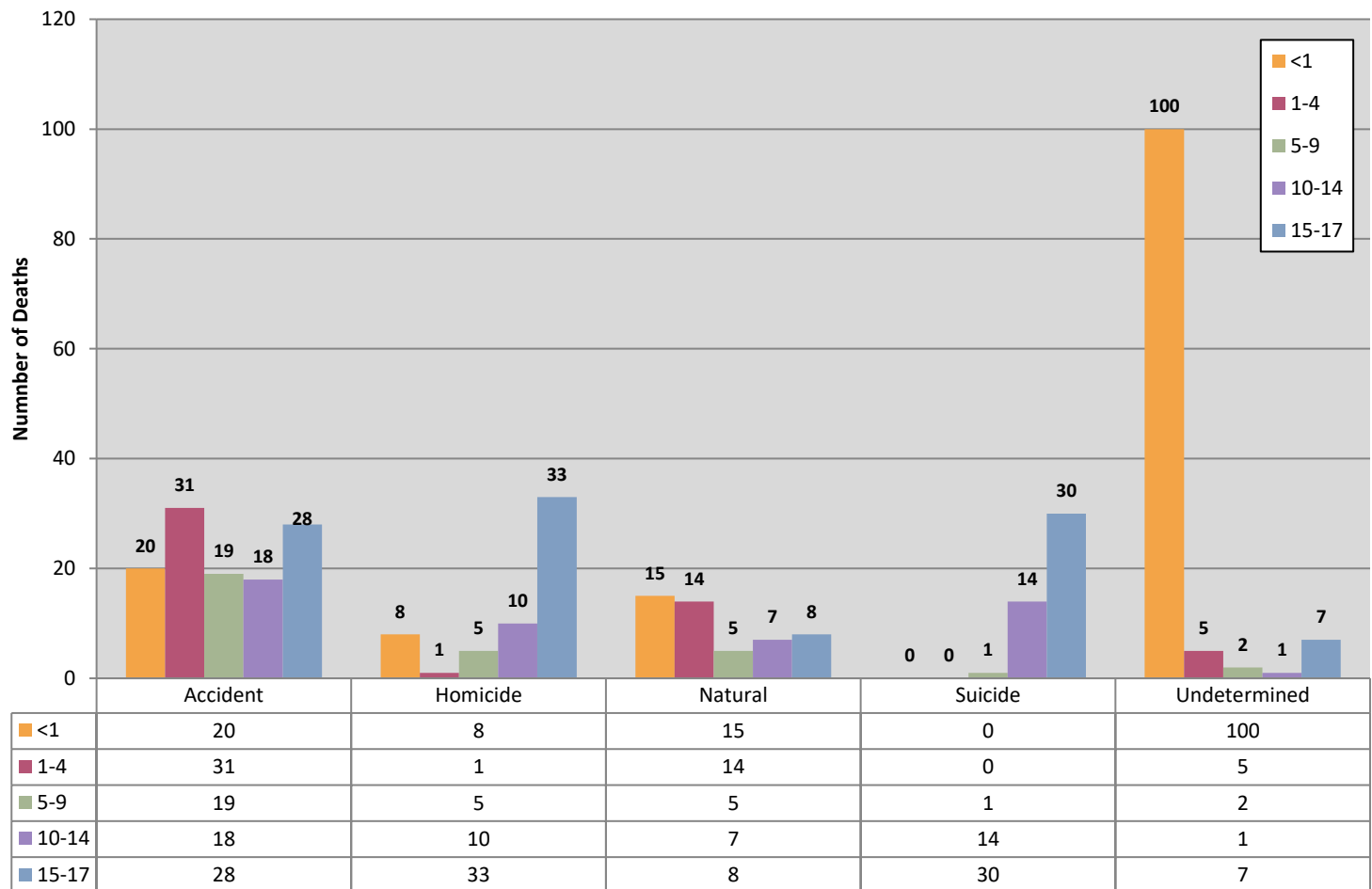
Figure 3.5 Number of Child Deaths by Manner and Race/Ethnicity, 2021

Figure 3.6 Number of Child Deaths by Manner and Age Group, 2021

ACCIDENTAL CHILD DEATHS (N=116)

The number of accidental child deaths increased by 16.0% in 2021 compared to 2020.

- The largest number of accidental deaths occurred among males (57.8%), Whites (48.3%), and children aged 15-17 years of age (33.6%)
- Black females and Black males had the highest rate of accidental death (12.9 and 10.1 deaths per 100,000 persons aged 0-17 years, respectively)
- Motor vehicle accidents were the leading method of death (42.2%), followed by accidental drownings (25.9%)

Figure 3.7 Number and Rate of Accidental Child Deaths by Year, 2003-2021

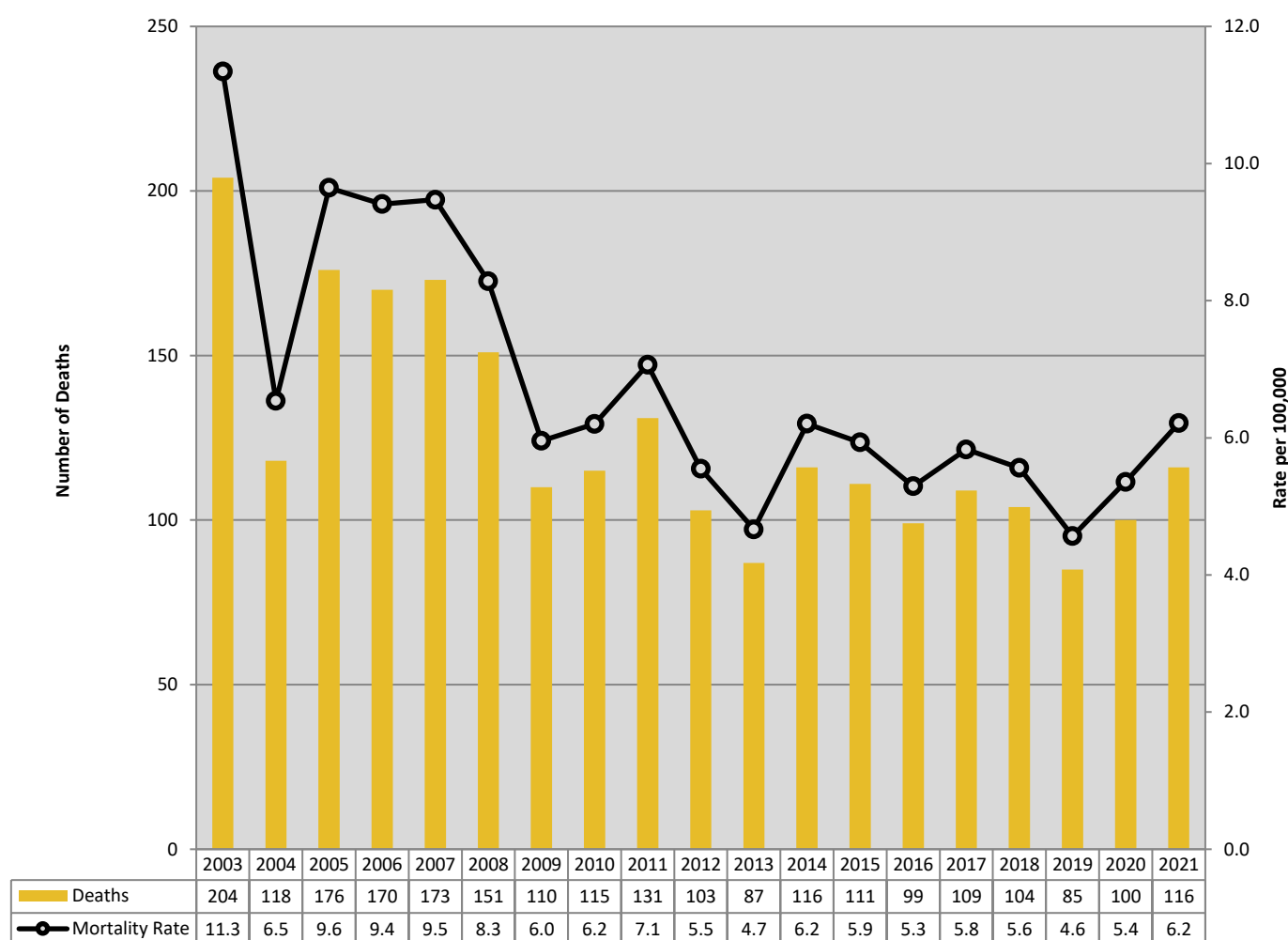


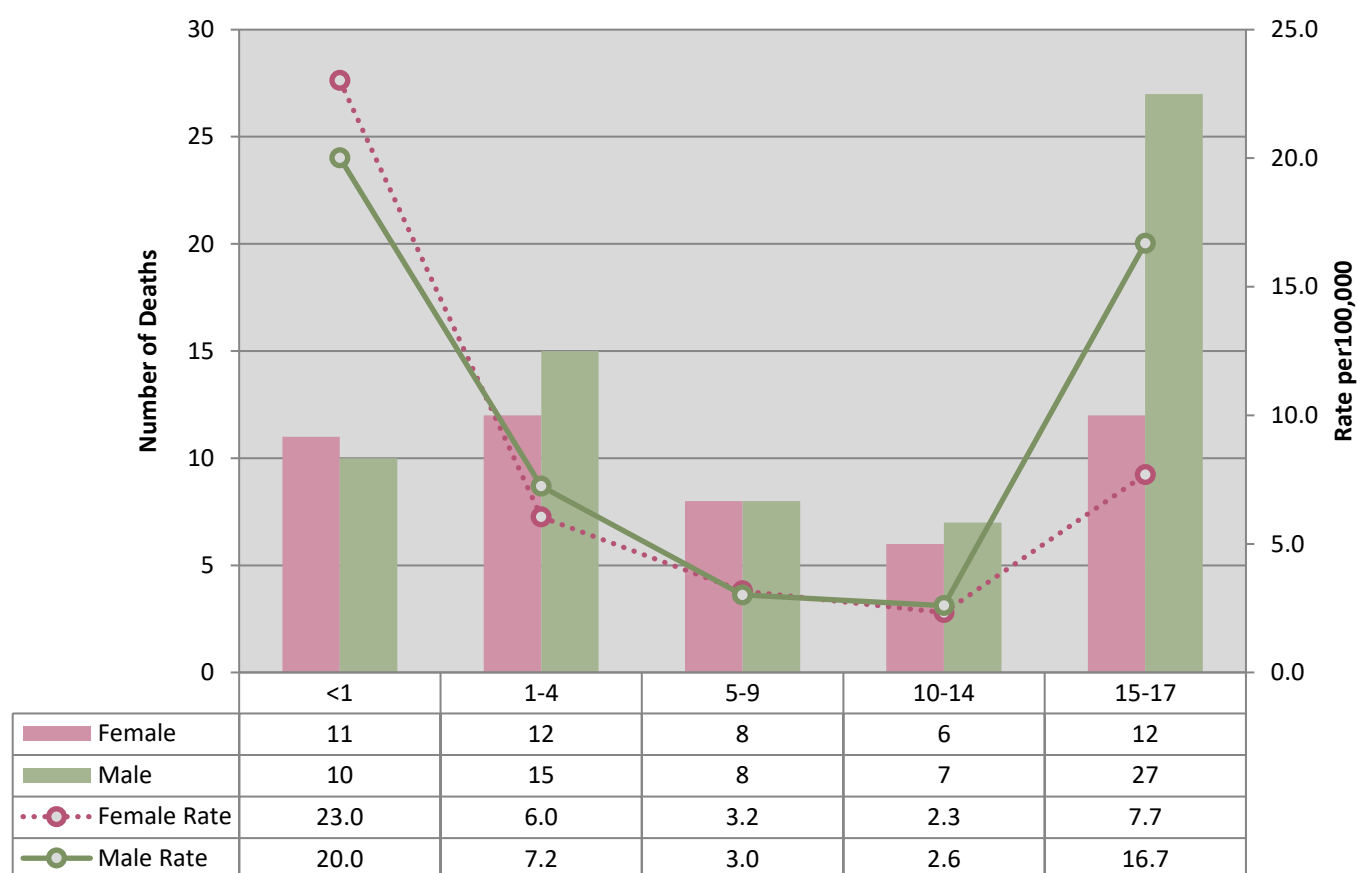
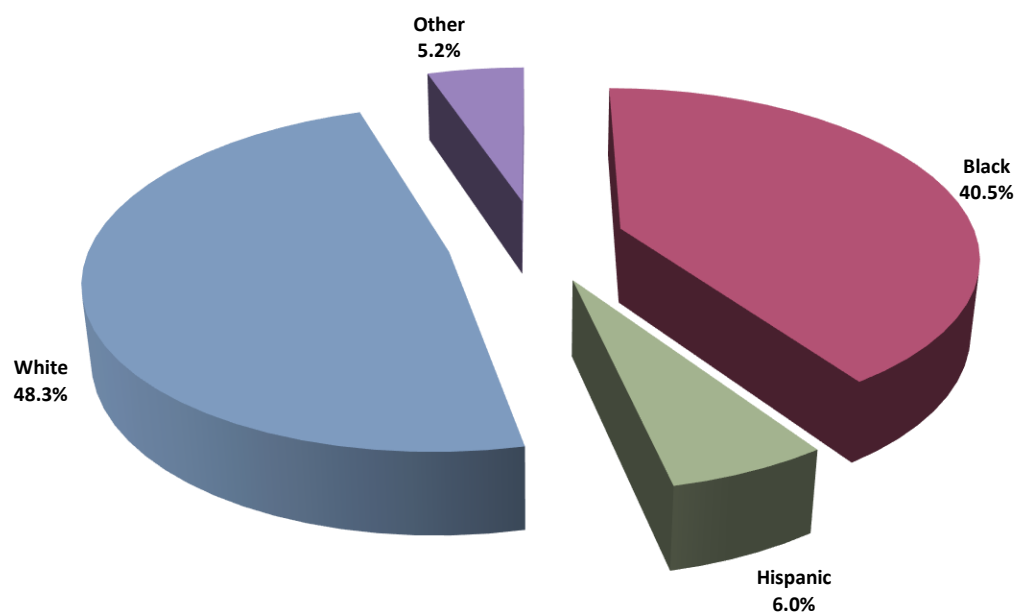
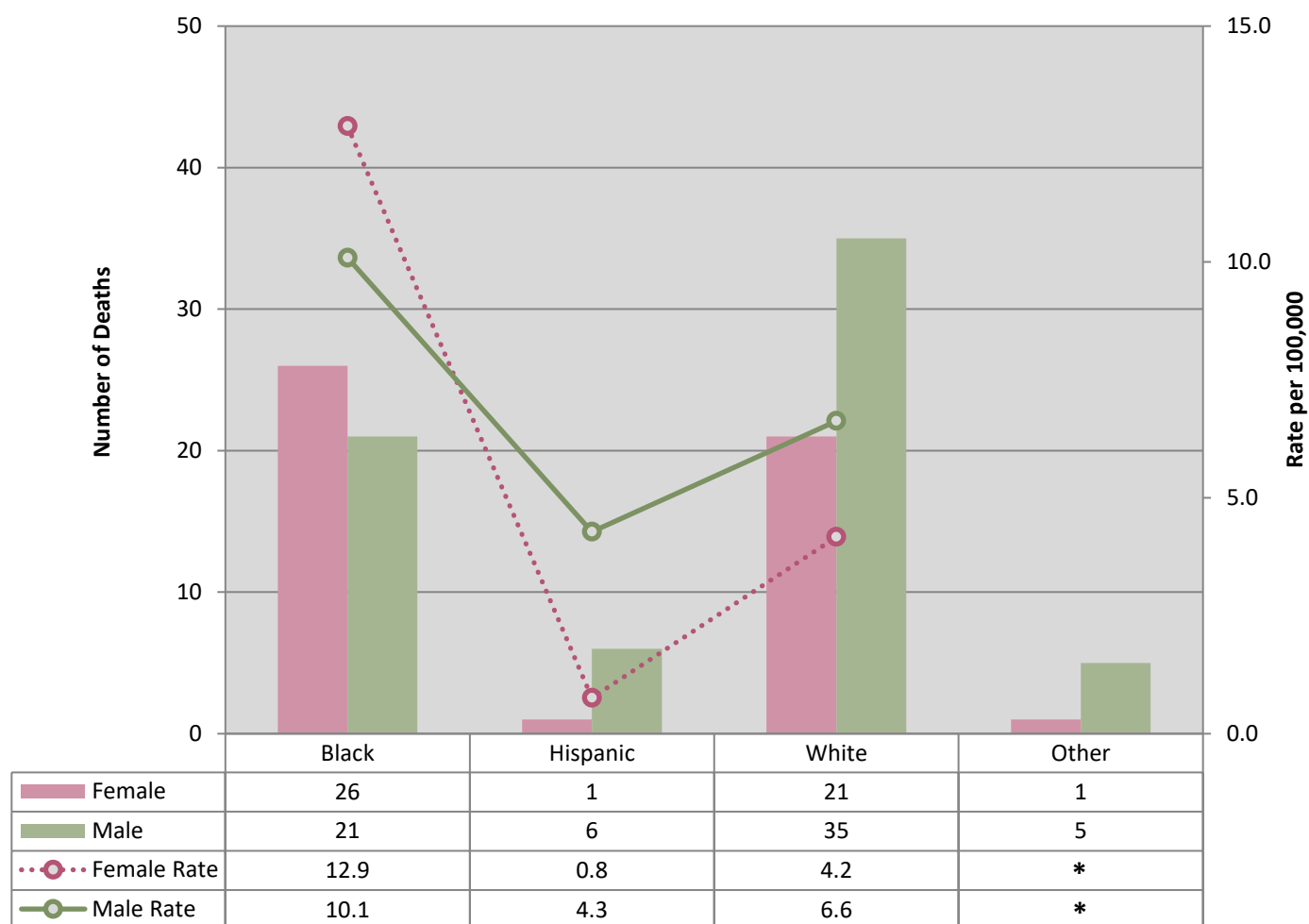
Figure 3.8 Number and Rate of Accidental Child Deaths by Age Group and Gender, 2021**Figure 3.9 Percentage of Accidental Child Deaths by Race/Ethnicity, 2021**

Figure 3.10 Number and Rate of Accidental Child Deaths by Gender and Race/Ethnicity, 2021

*No rate can be calculated

Note: Rates calculated from small case counts (n<5) are considered unreliable and should be interpreted with caution (Hispanic females)

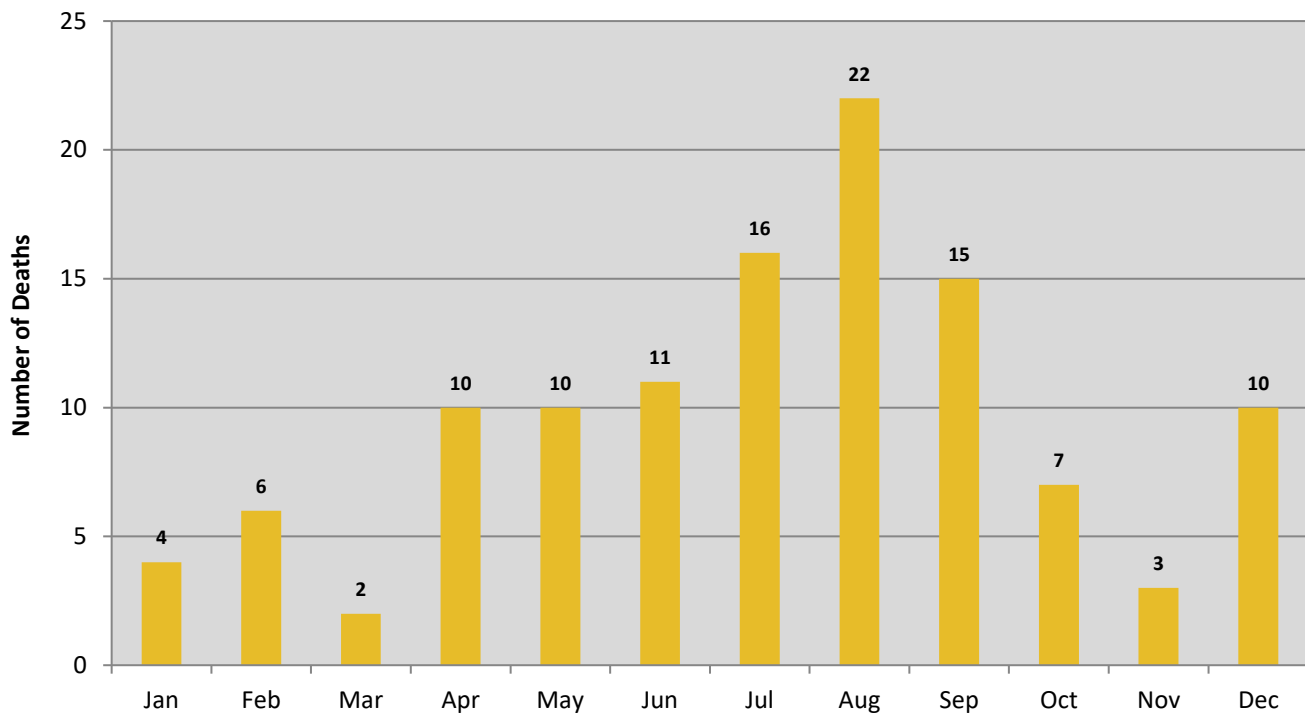
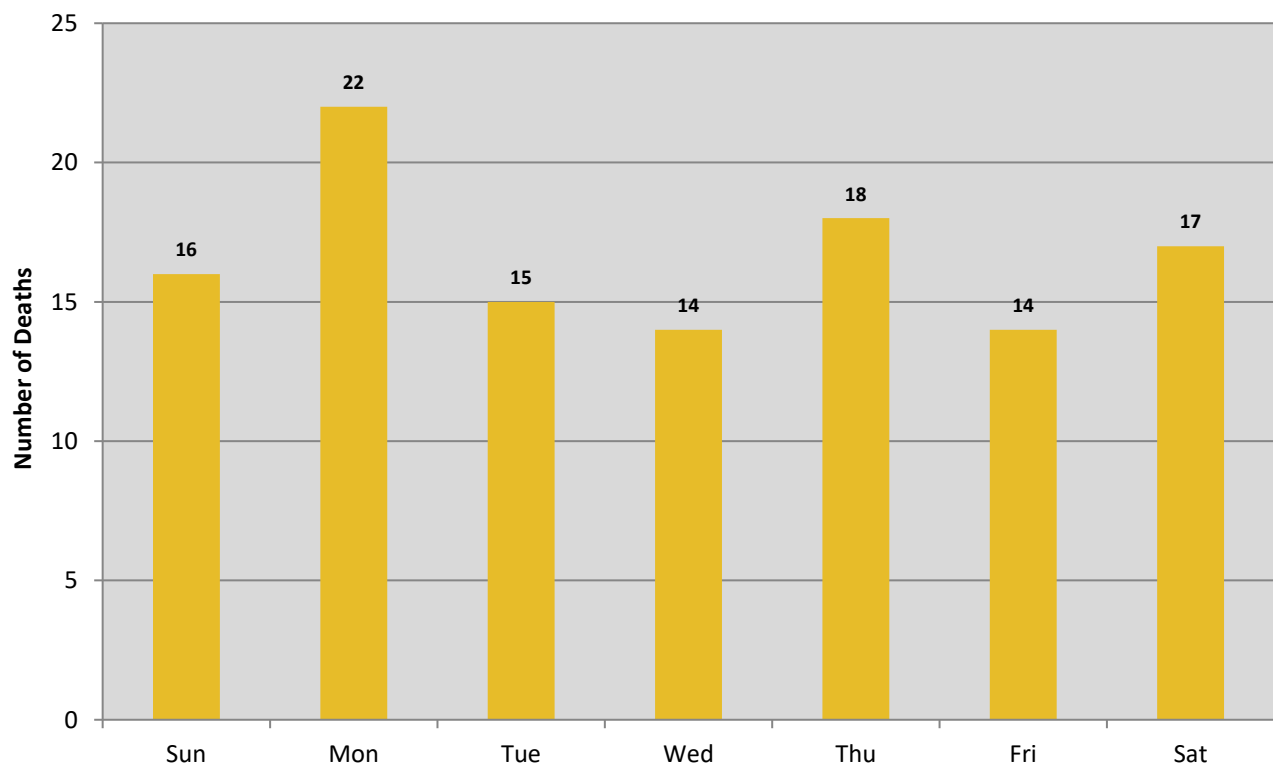
Figure 3.11 Number of Accidental Child Deaths by Month of Death, 2021**Figure 3.12 Number of Accidental Child Deaths by Day of Week, 2021**

Table 3.1 Number of Accidental Child Deaths by Cause and Method of Death, 2021

Method of Death	Autopsied	Total Cases
Asphyxia		
Choked on food/foreign object	2	2
Drowned	12	15
Mechanical/Positional asphyxia	6	6
Suffocated/Smothered	9	9
Drug Use		
Ingested and/or injected illicit, prescription, and/or other type of drug	11	11
Environmental Exposure		
Exposure to heat	1	1
Fire		
Thermal burns and/or inhalation of combustion products	10	17
Motor Vehicle		
All terrain vehicle	1	2
Boat	0	1
Car	4	28
Motorcycle	0	2
Pickup truck	0	2
Scooter	0	1
Sport utility vehicle	1	5
Truck other	0	1
Van	0	3
Unknown	1	4
Traumatic Injury		
Gunshot wound		
Handgun	4	4
Other Unnatural Deaths		
Other	1	2
TOTAL ACCIDENTAL CHILD DEATHS	63	116

CHILD HOMICIDE DEATHS (N=57)

The number of child homicide deaths in 2021 were nearly identical to 2020. Homicides represented 14.9% of all child deaths.

- Homicides in children in 2021 occurred most frequently among males (80.7%) and among Blacks (73.7%)
- Black males had the highest rate of child homicides with 16.8 deaths per 100,000 persons aged 0-17 years
- Gunshot wounds (73.7%) were the most common method of child homicide in 2021, followed by beatings (12.3%)

Figure 3.13 Number and Rate of Child Homicide Deaths by Year, 1999-2021

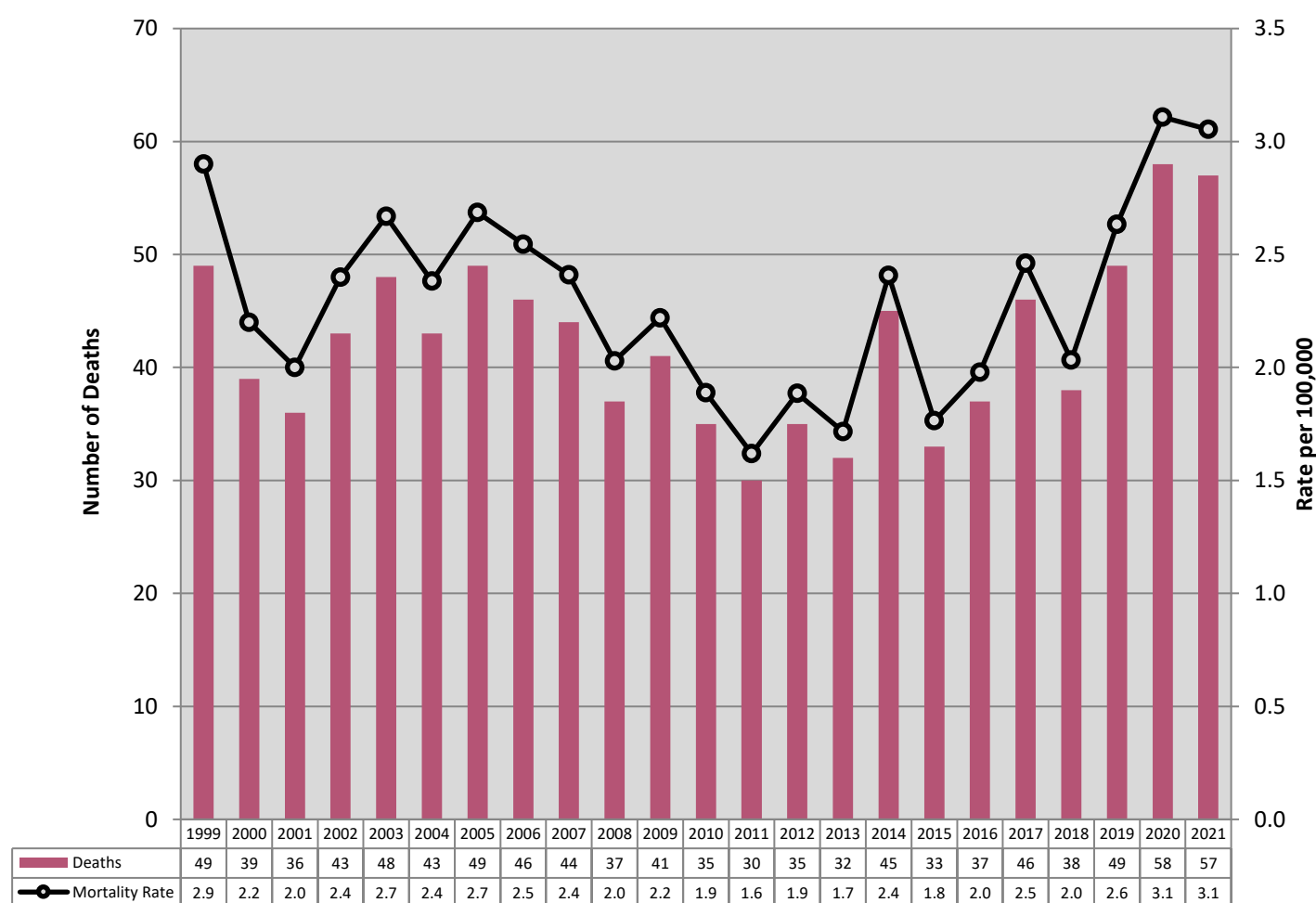


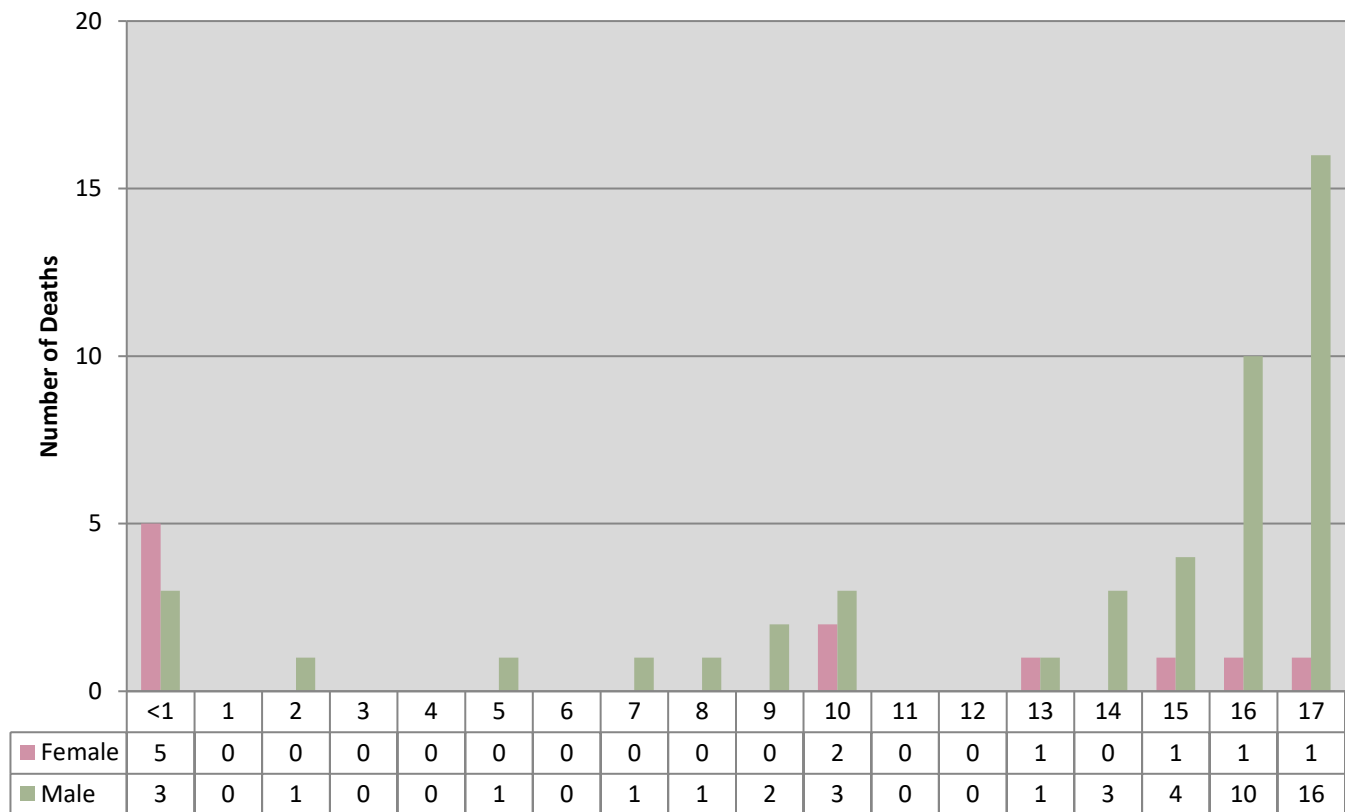
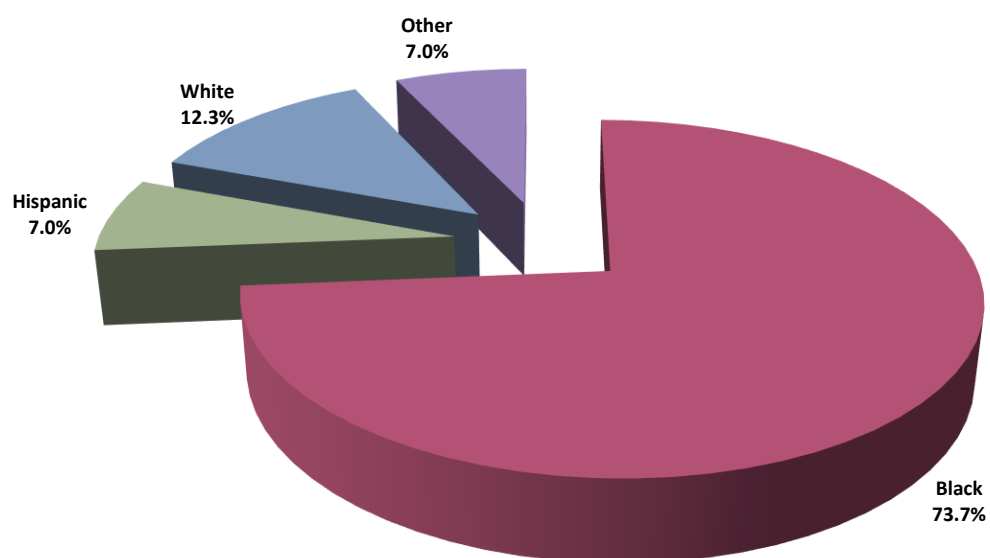
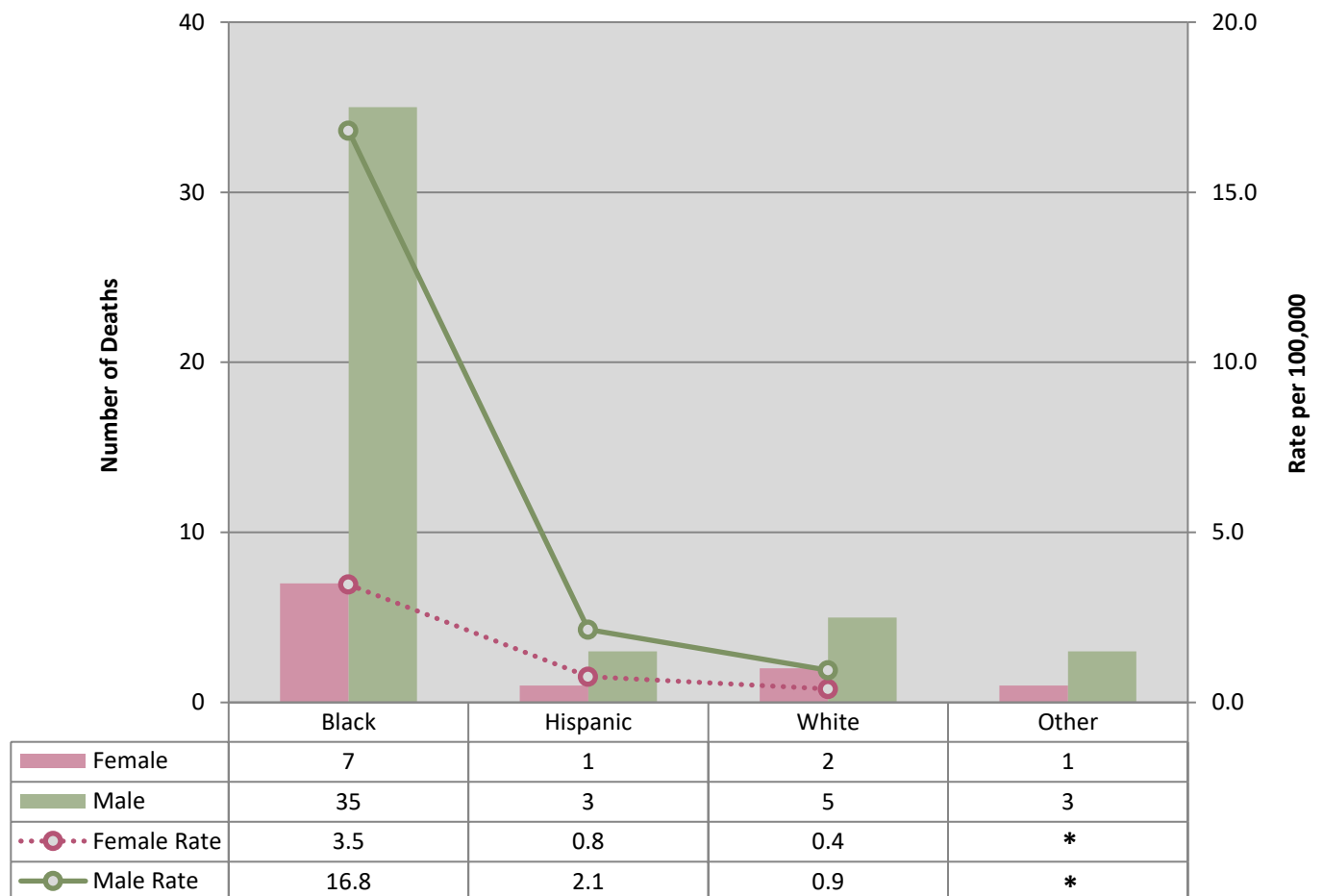
Figure 3.14 Number of Child Homicide Deaths by Age and Gender, 2021**Figure 3.15 Percentage of Child Homicide Deaths by Race/Ethnicity, 2021**

Figure 3.16 Number and Rate of Child Homicide Deaths by Gender and Race/Ethnicity, 2021

*No rate can be calculated

Note: Rates calculated from small case counts (n<5) are considered unreliable and should be interpreted with caution (Hispanics and White females)

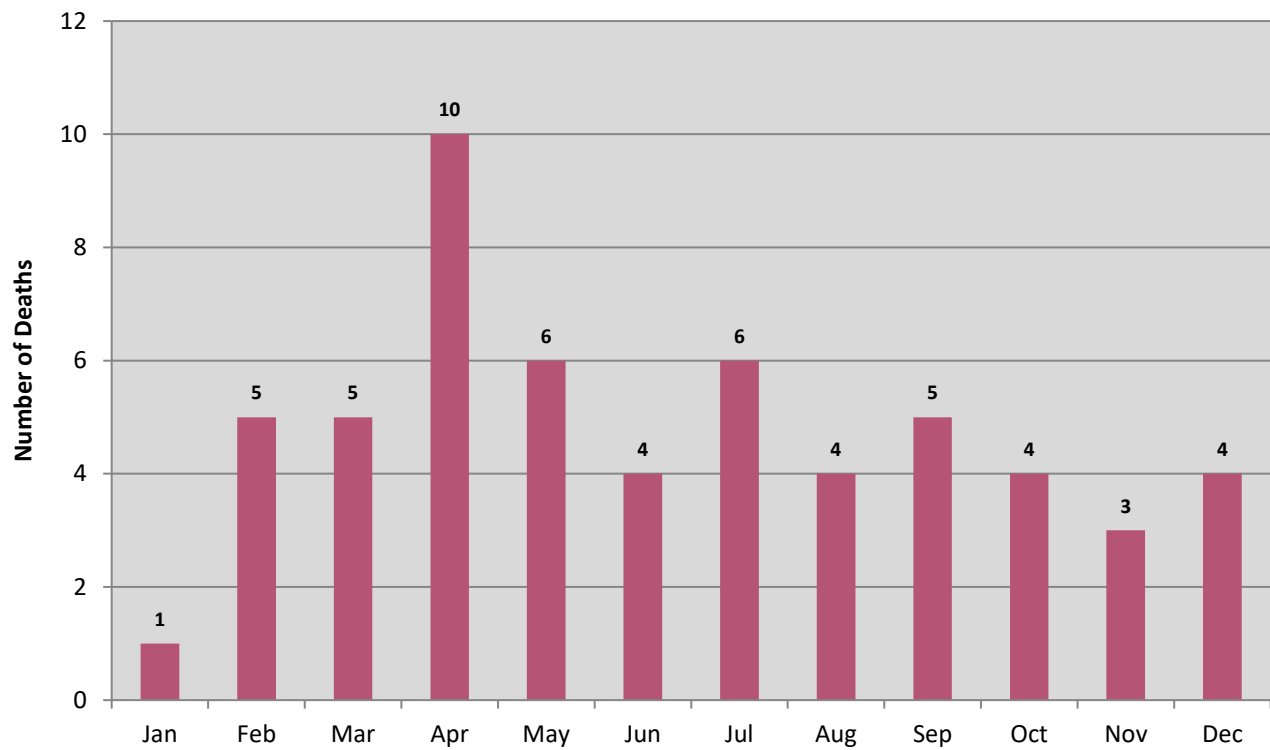
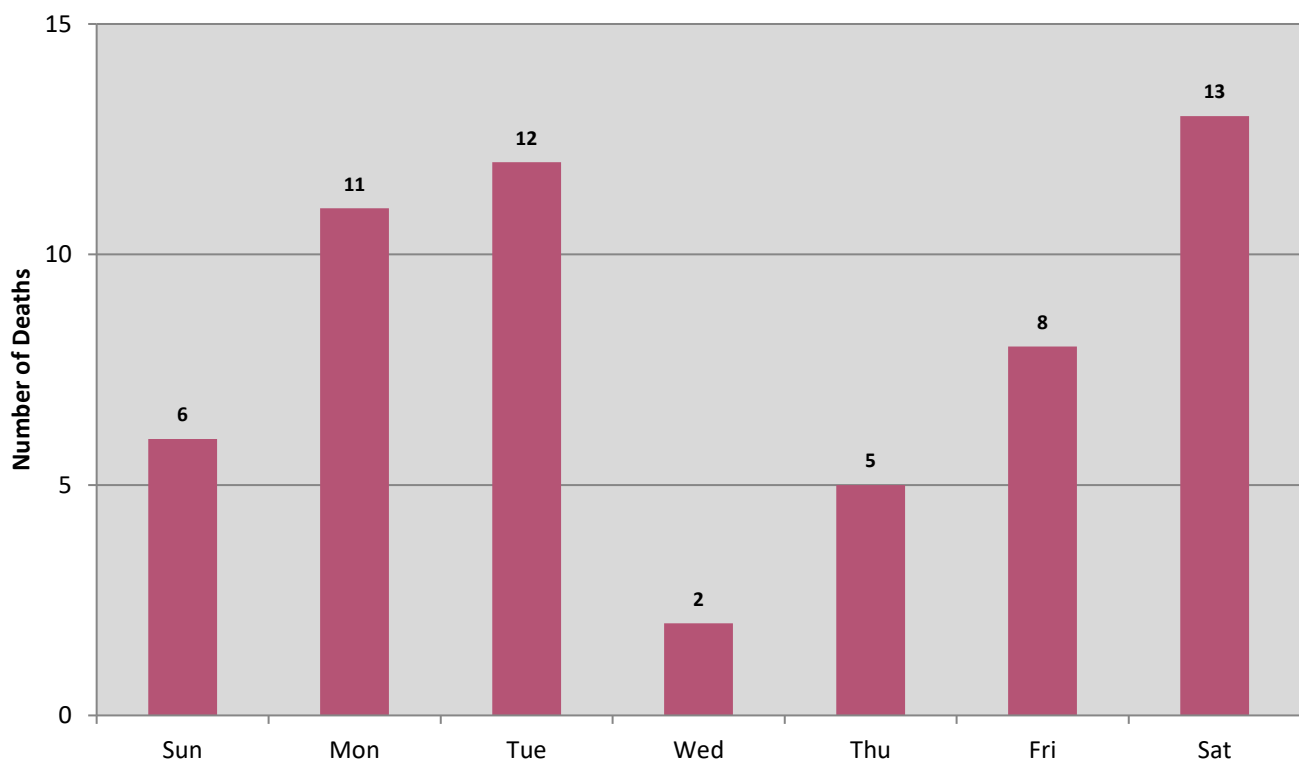
Figure 3.17 Number of Child Homicide Deaths by Month of Death, 2021**Figure 3.18 Number of Child Homicide Deaths by Day of the Week, 2021**

Table 3.2 Number of Child Homicide Deaths by Cause and Method of Death, 2021

Method of Death	Autopsied	Total Cases
Asphyxia		
Strangled/Neck compression	2	2
Suffocated/Smothered		
Drug Use		
Ingested and/or injected illicit, prescription, and/or other type of drug	1	1
Traumatic Injury		
Beaten by assailant(s)	7	7
Sharp force injuries	1	1
Shot by assailant(s) with firearm		
Handgun	33	33
Multiple	1	1
Rifle	1	1
Unknown	7	7
Other		
Dehydration and/or starvation	1	1
Other/Undetermined	3	3
TOTAL CHILD HOMICIDE DEATHS	57	57

NATURAL CHILD DEATHS (N=49)

Infants made up the largest proportion of natural child deaths (30.6%) that fell under the OCME's jurisdiction.

- Various cardiac disease/disorders were the most common causes of natural child deaths in 2021

NOTE: Due to the change of OCME case definitions which includes the addition of the sudden unexpected infant death (SUID) classification of infant death in 2007 (undetermined manner of death), sudden infant death syndrome (SIDS) cases have drastically decreased (natural manner of death)

Figure 3.19 Number of Natural Child Deaths by Age Group and Gender, 2021

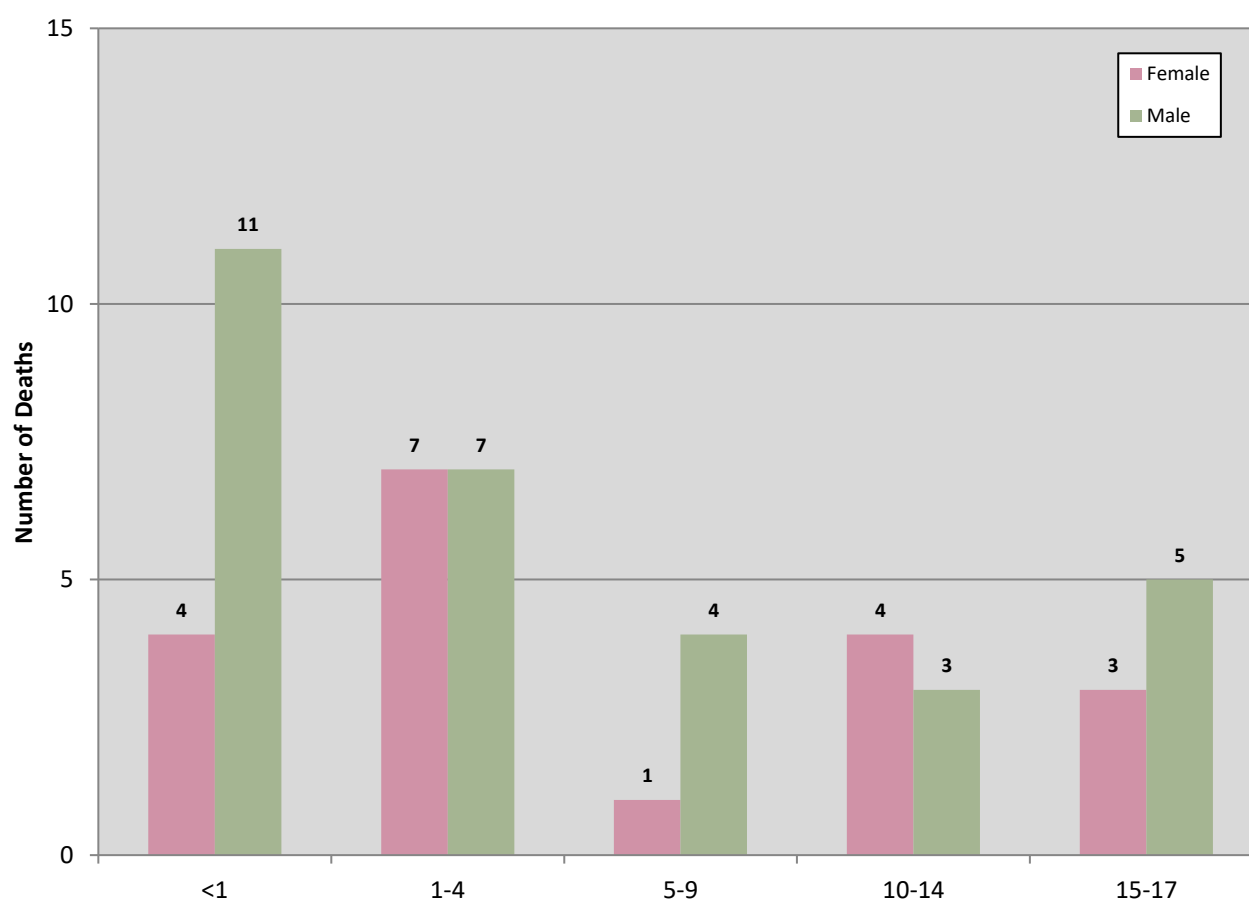


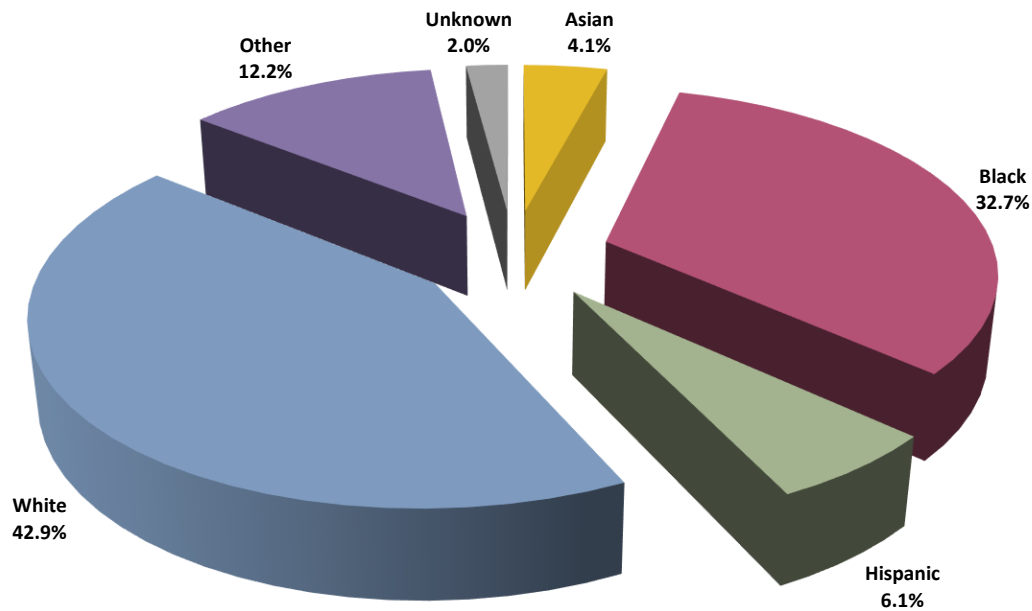
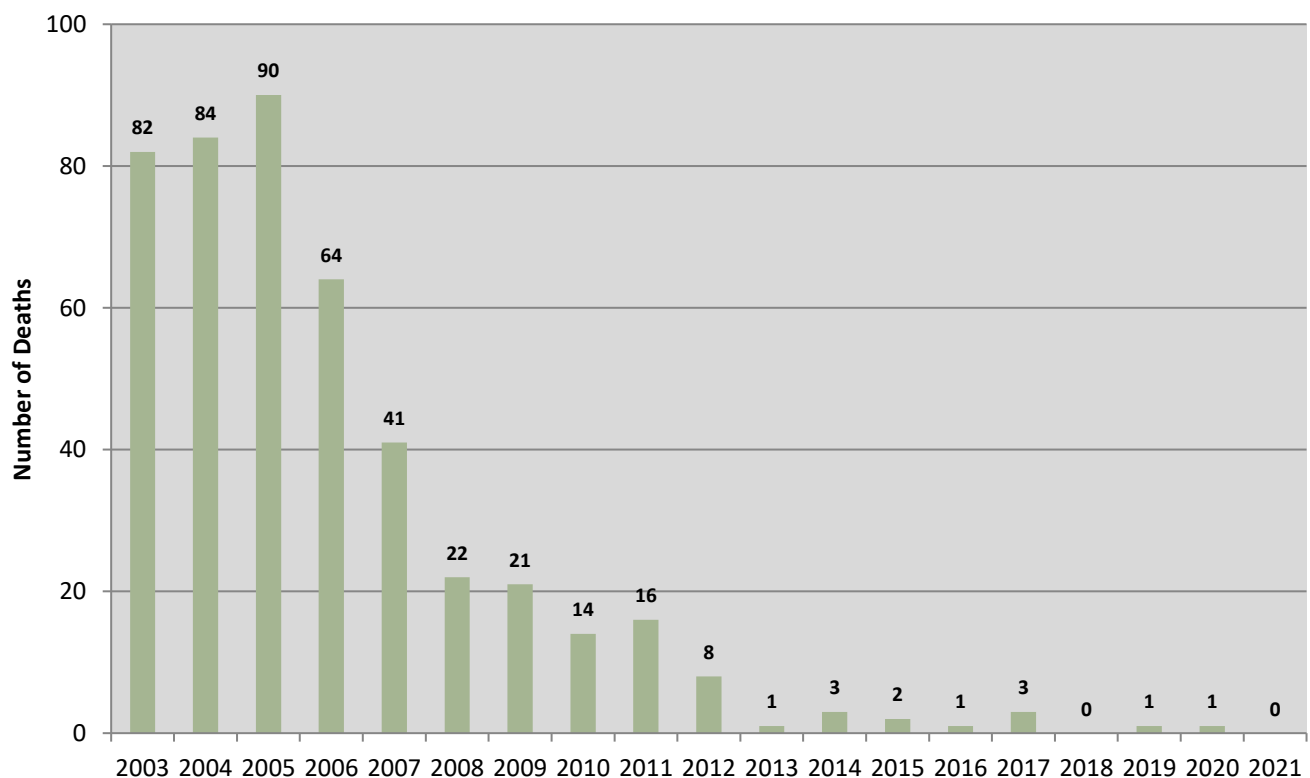
Figure 3.20 Percentage of Natural Child Deaths by Race/Ethnicity, 2021**Figure 3.21 Number of OCME SIDS Cases by Year of Death, 2003-2021**

Table 3.3 Number of Natural Child Deaths by Cause and Method of Death, 2021

NATURAL CHILD DEATHS	Autopsied	Total Cases
Cardiovascular Diseases/Disorders		
Cardiac arrhythmia not specified	3	3
Congenital heart defect	4	4
Vascular dissection/rupture	1	1
Other cardiac disease/disorder	4	4
Central Nervous System Diseases/Disorders		
CNS malignancy	1	1
Meningitis (bacterial or viral)	1	2
Seizure disorder	4	4
Other central nervous system disease/disorder	1	1
Gastrointestinal Disease/Disorder		
GI Hemorrhage	1	1
Other gastrointestinal disease/disorder	3	3
Perinatal and Pediatric Diseases/Disorders		
Fetal complications	1	1
Other perinatal or pediatric disease/disorder	1	2
Pulmonary Diseases/Disorders		
Asthma	3	3
Emboli	1	1
Pneumonia	2	2
Other Pulmonary Disease/Disorder	4	4
Systemic Diseases/Disorders		
Sepsis	2	2
Other infectious disease	5	6
Other systemic disease/disorder	1	1
Other		
Other/Undetermined	3	3
TOTAL NATURAL CHILD DEATHS	46	49

CHILD SUICIDE DEATHS (N=45)

The number of child suicide deaths in 2021 decreased 11.8% compared to 2020.

- Child suicides are very similar to adult suicides as they occur more frequently in males (66.7%) and among Whites (53.3%)
- The most common methods of child suicides were gunshot wounds (57.8%) and hangings (28.9%)

Figure 3.22 Number and Rate of Child Suicide Deaths by Year, 1999-2021

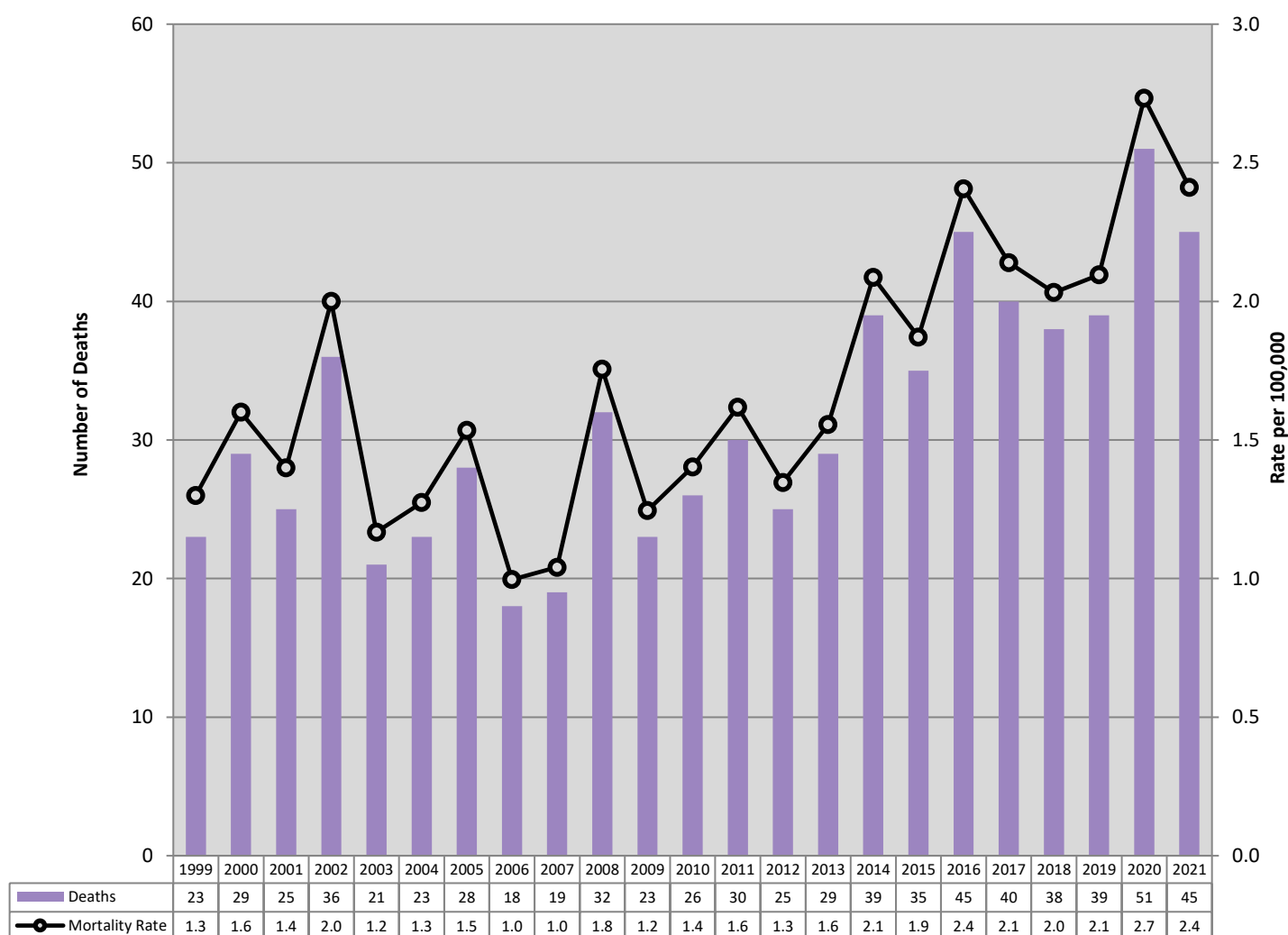


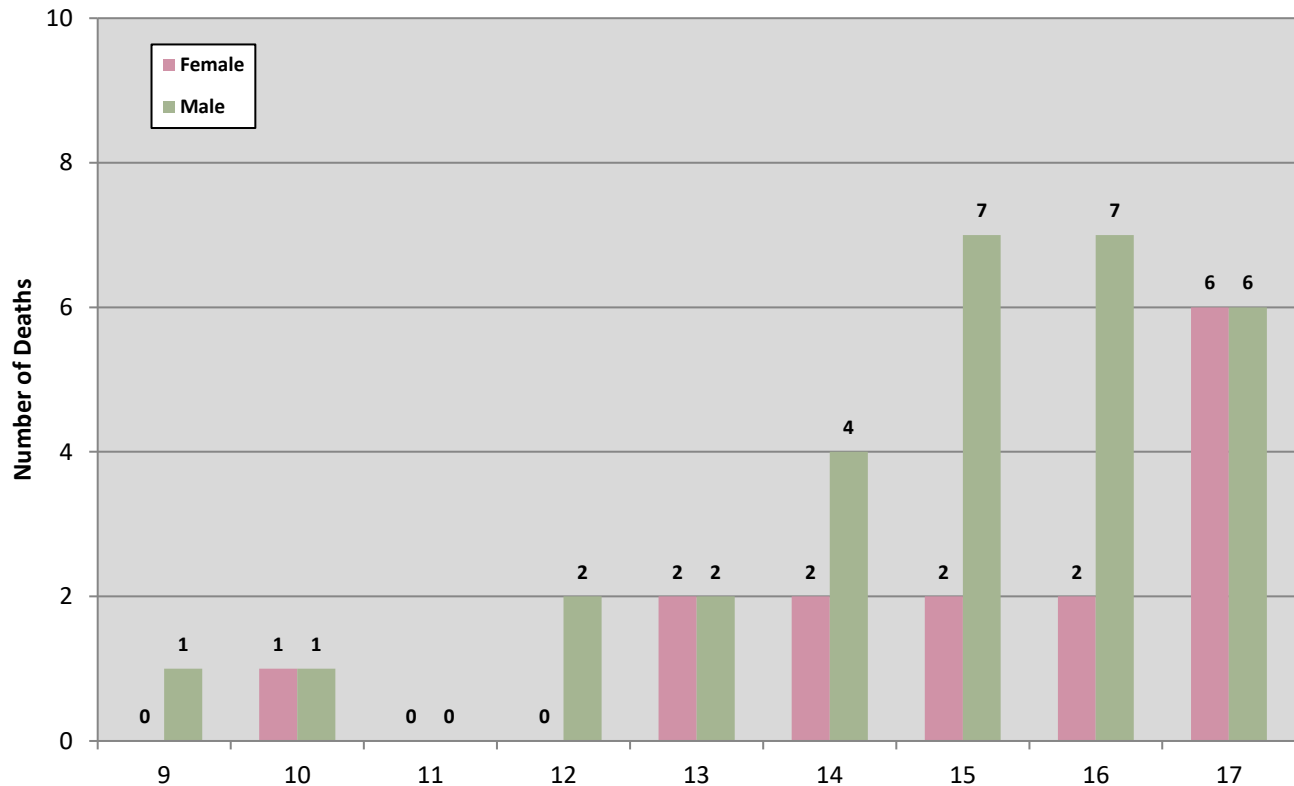
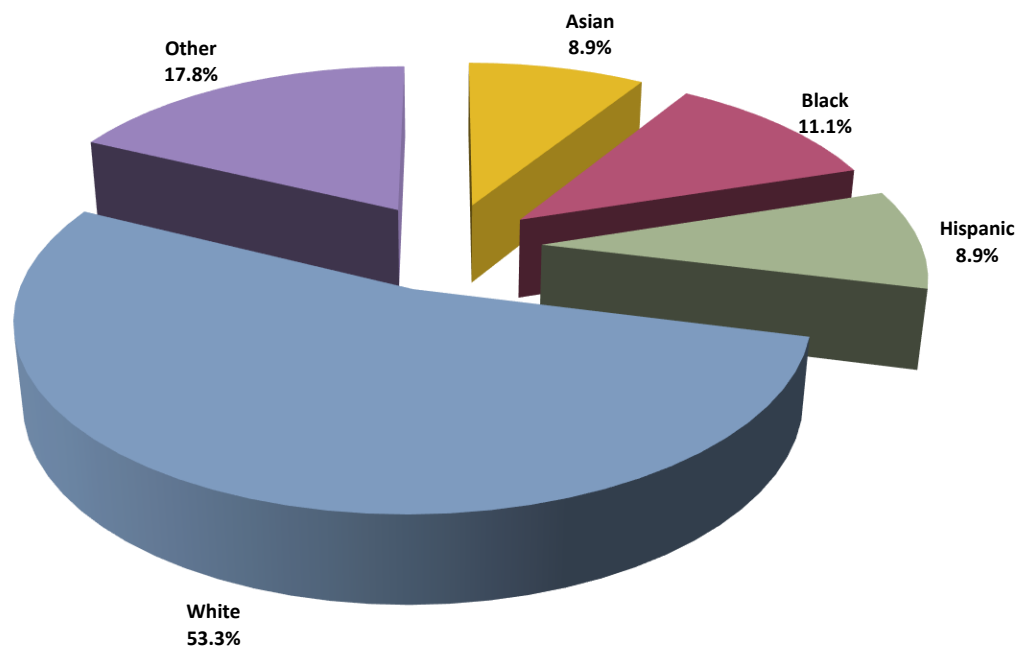
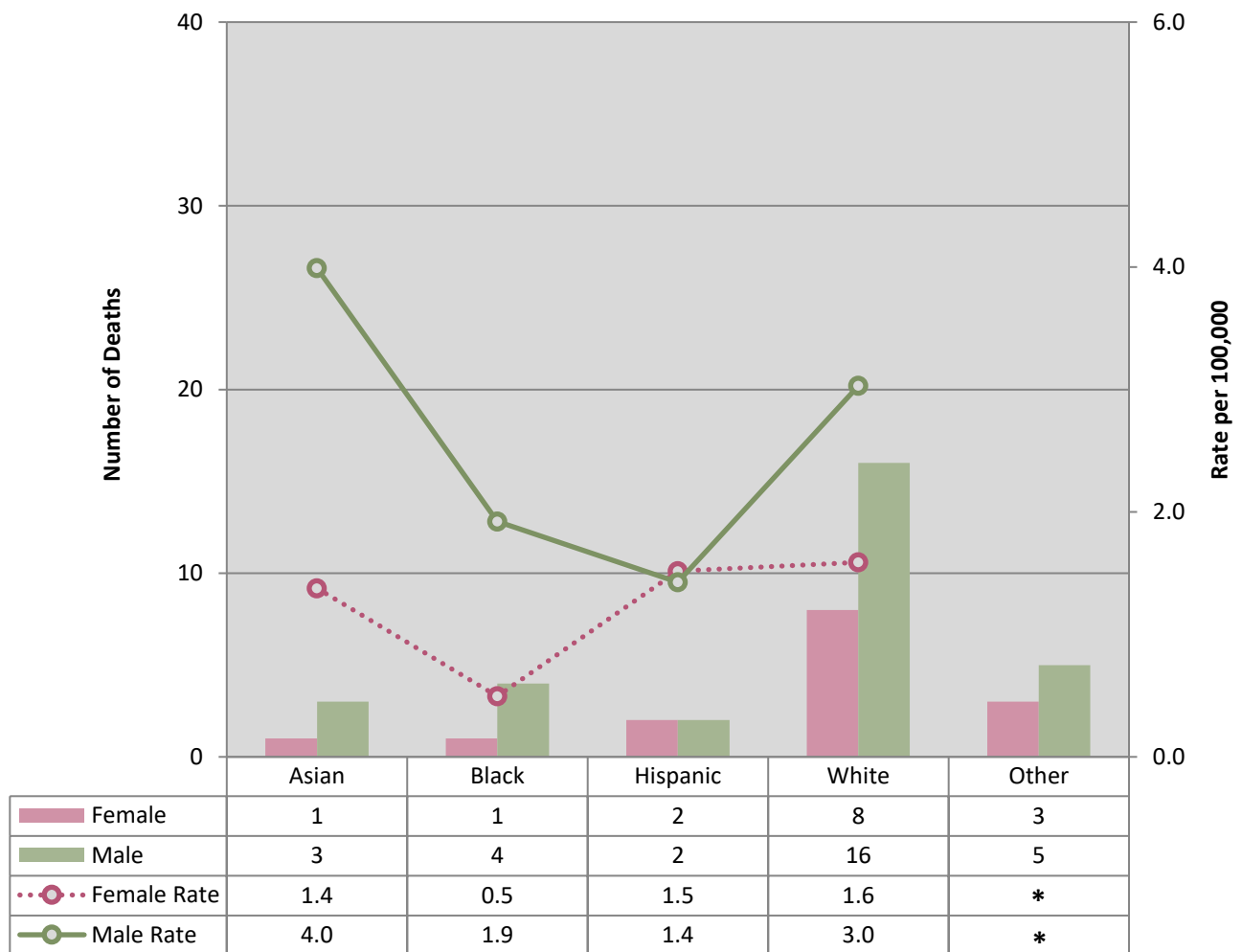
Figure 3.23 Number of Child Suicide Deaths by Age and Gender, 2021**Figure 3.24 Percentage of Child Suicide Deaths by Race/Ethnicity, 2021**

Figure 3.25 Number and Rate of Child Suicide Deaths by Gender and Race/Ethnicity, 2021

*No rate can be calculated

Note: Rates calculated from small case counts ($n < 5$) are considered unreliable and should be interpreted with caution (Asians, Blacks, and Hispanics)

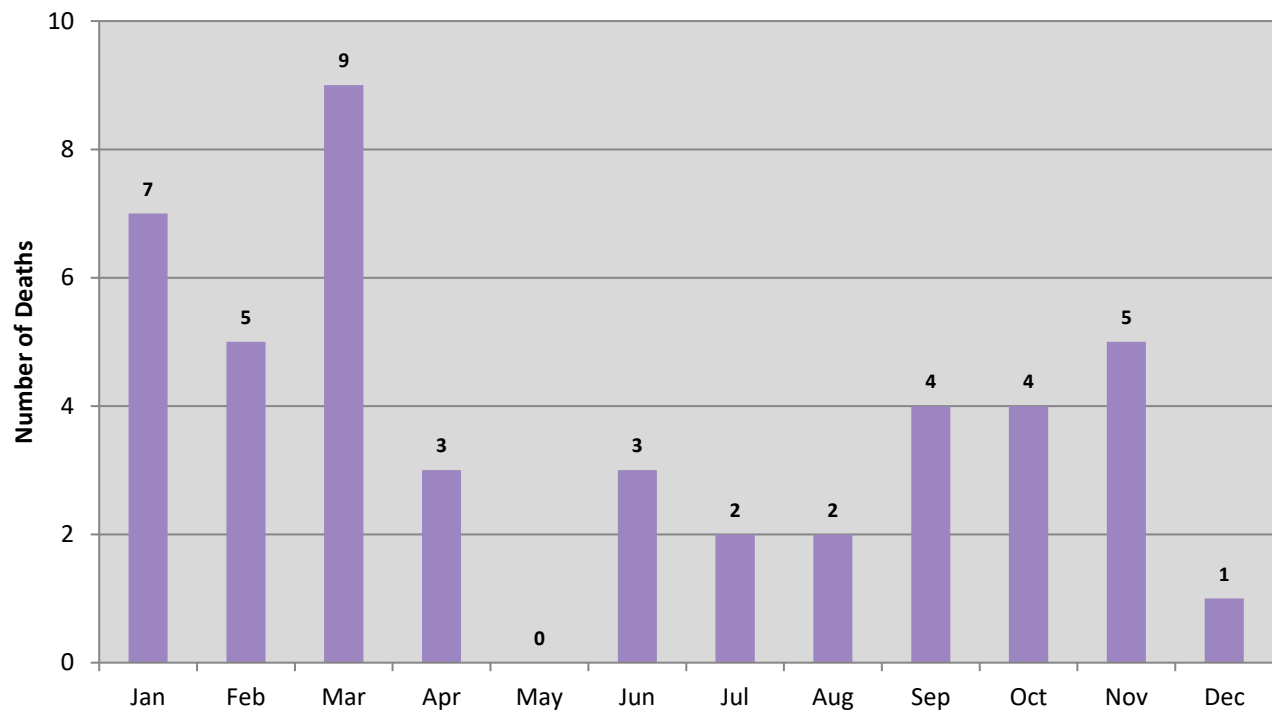
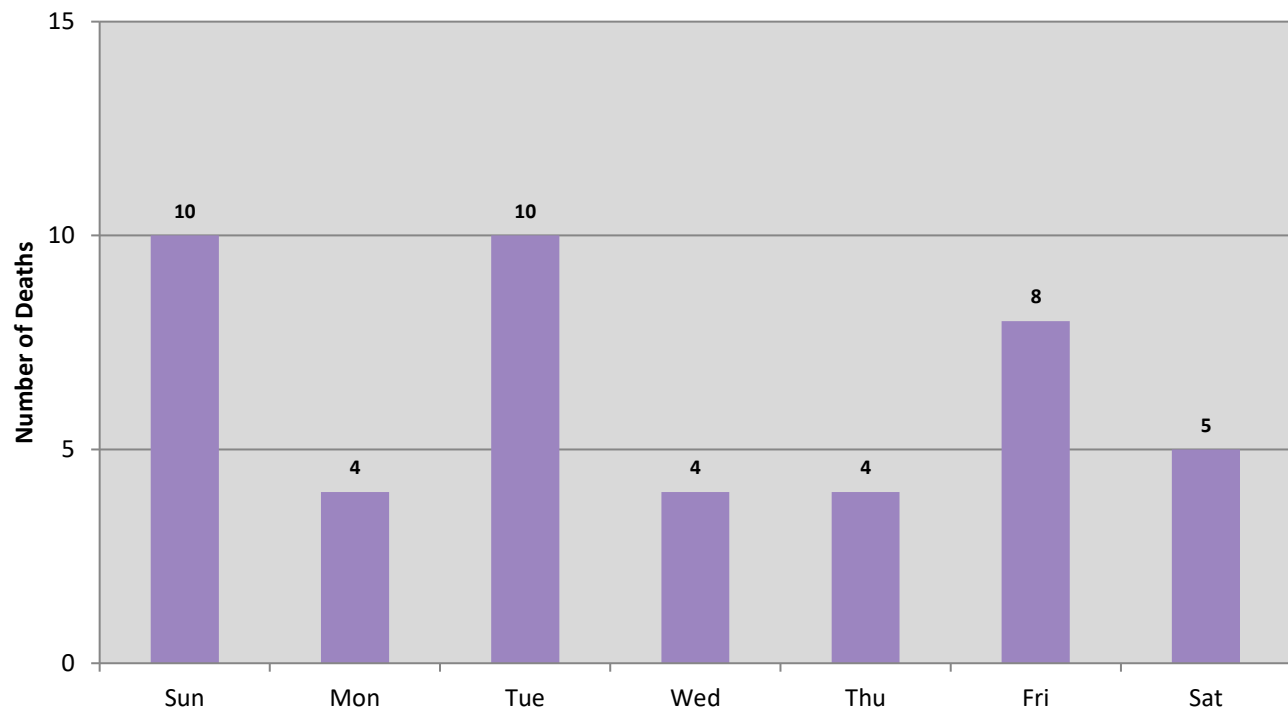
Figure 3.26 Number of Child Suicide Deaths by Month, 2021**Figure 3.27 Number of Child Suicide Deaths by Day of the Week, 2021**

Table 3.4 Number of Child Suicide Deaths by Cause and Method of Death, 2021

Method of Death	Autopsied	Total Cases
Asphyxia		
Drowned	1	1
Hanged	11	13
Suffocated/Smothered	1	1
Drug Use		
Ingested and/or injected illicit, prescription, and/or other type of drug	3	3
Motor Vehicle		
Unknown	1	1
Traumatic Injury		
Gunshot Wound		
Handgun	23	24
Rifle	2	2
TOTAL CHILD SUICIDE DEATHS	42	45

UNDETERMINED CHILD DEATHS (N=115)

One hundred fifteen undetermined deaths of children occurred in 2021; a 15.0% increase from 2020 and representing 30.1% of all child deaths that fell under OCME jurisdiction in 2021.

- Infants <1 year old accounted for 87.0% of undetermined deaths
- Sudden unexpected infant death (SUID) deaths of infants <1 year of age represented 73.0% of all undetermined child deaths

Figure 3.28 Number and Rate of Undetermined Child Deaths by Year, 2006-2021

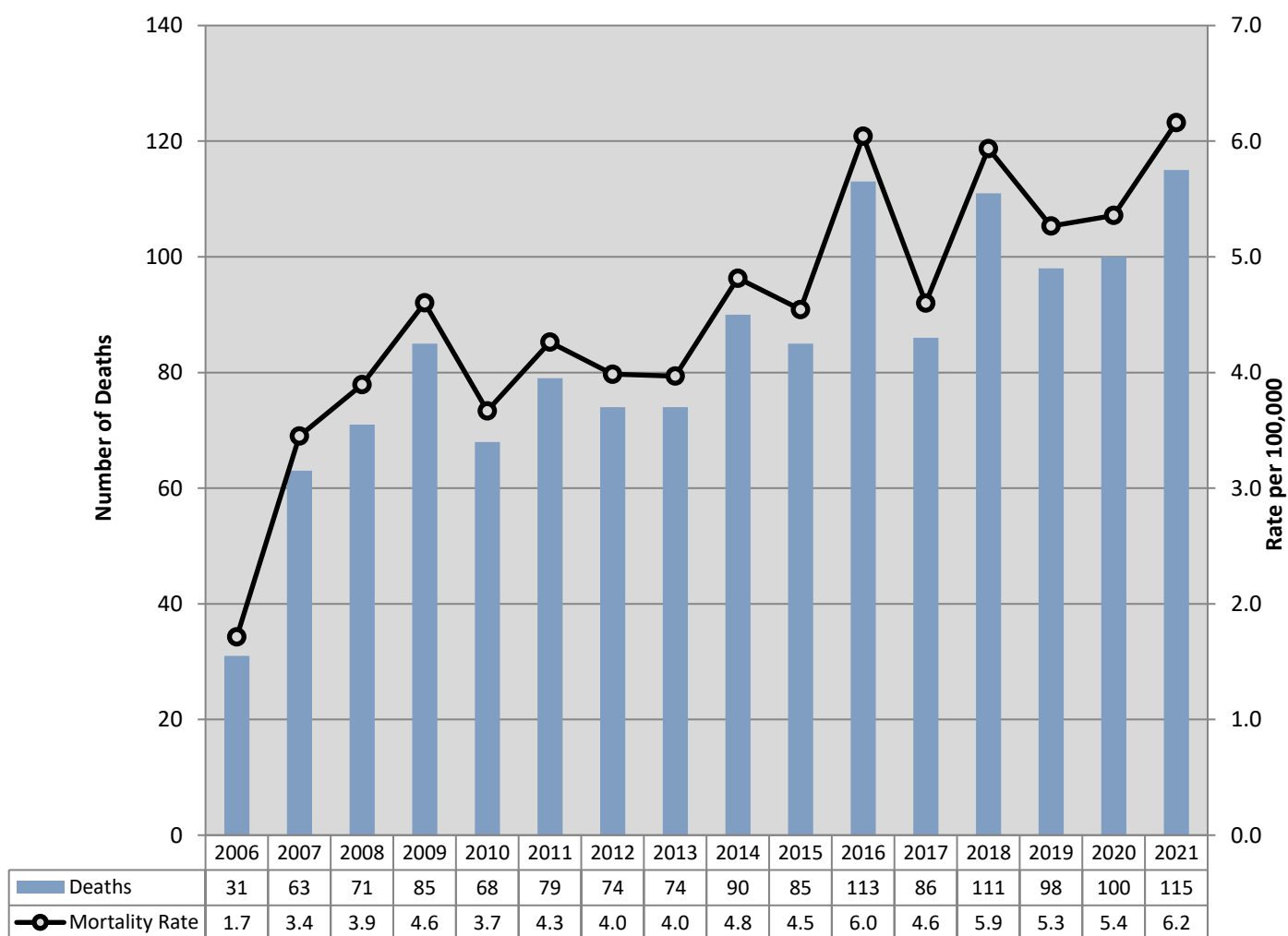


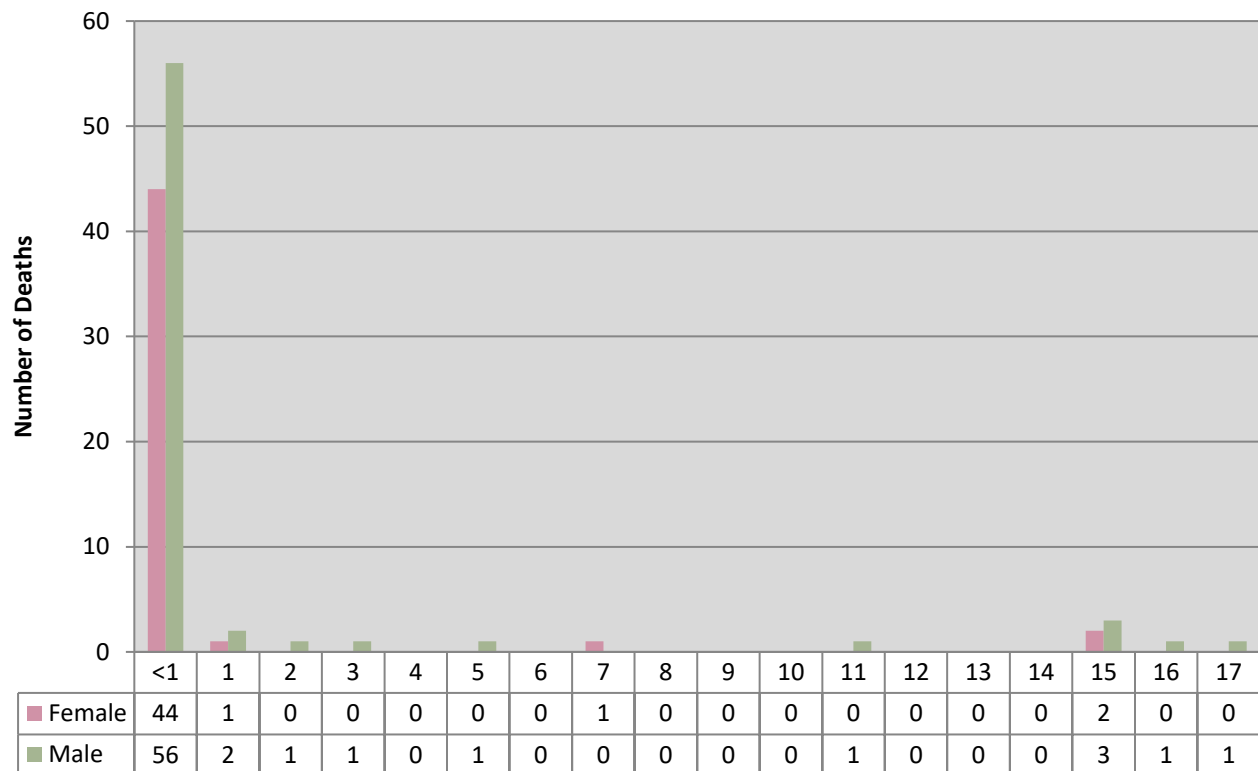
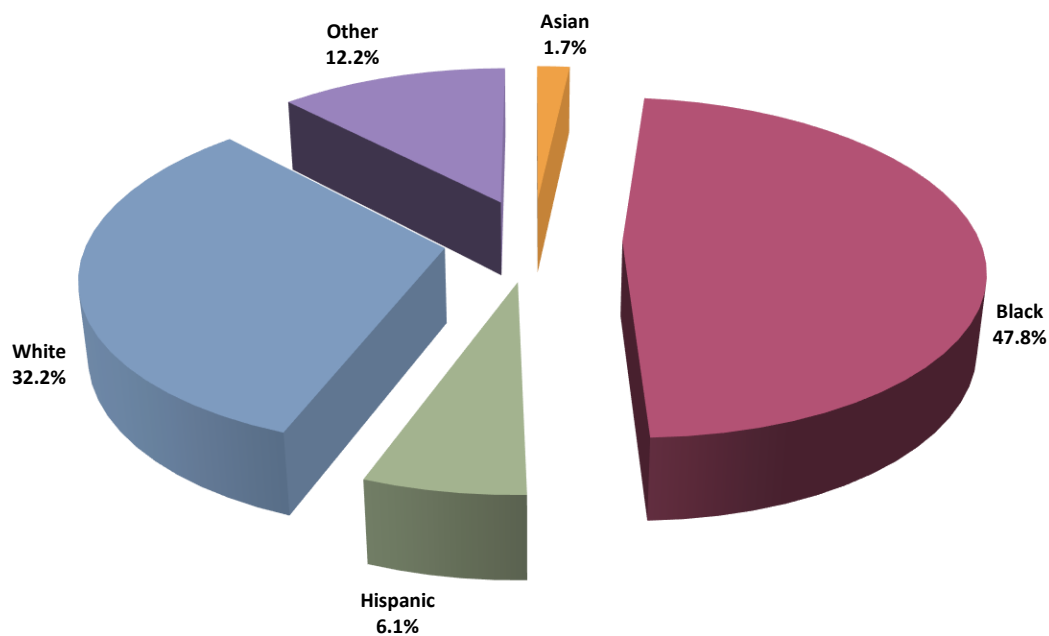
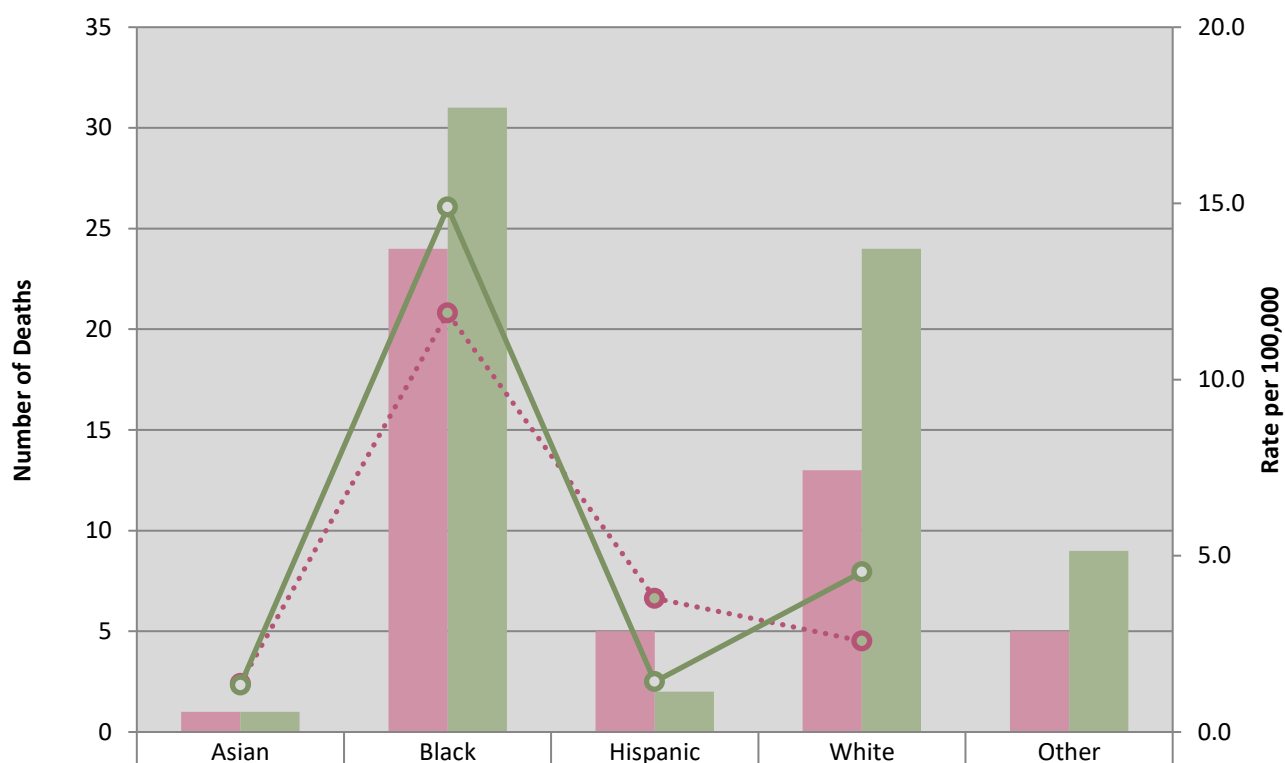
Figure 3.29 Number of Undetermined Child Deaths by Age and Gender, 2021**Figure 3.30 Percentage of Undetermined Child Deaths by Race/Ethnicity, 2021**

Figure 3.31 Number and Rate of Undetermined Child Deaths by Gender and Race/Ethnicity, 2021

*No rate can be calculated

Note: Rates calculated from small case counts (n<5) are considered unreliable and should be interpreted with caution (Asians and Hispanic males)

Table 3.5 Number of Undetermined Child Deaths by Cause and Method of Death, 2021

Determined Cause and Method of Death	Autopsied	Total Cases
Drug Use		
Ingested and/or injected illicit, prescription, and/or other type of drug	6	6
Traumatic Injury		
Gunshot wound		
Handgun	2	2
Rifle	1	1
Shotgun	1	1
Unknown	1	1
Sharp force injury		
Other Unnatural		
Other	2	2
<i>Subtotal for Determined Cause and Method of Death</i>	13	13
Undetermined Cause and Method of Death	Autopsied	Total Cases
Undetermined Manner and Cause of Death		
Sudden Unexpected Infant Death (SUID)	84	84
Other or undetermined after autopsy and/or toxicology	17	18
<i>Subtotal for Undetermined Manner and Cause of Death</i>	101	102
TOTAL UNDETERMINED CHILD DEATHS	114	115

SECTION 4: MOTOR VEHICLE FATALITIES (N=1,116)

The OCME investigated 1,116 motor vehicle collision-related deaths in 2021, which was an increase from 2020 (13.4%).

- The vast majority of cases were accidents (98.0%) and victims were most often male (69.4%)
- Of the 831 (74.5%) motor vehicle fatalities tested for ethanol, 29.5% (n=245) had a blood alcohol concentration greater than or equal to 0.08%; of those 245 decedents who were at or above the legal limit of alcohol, 78.0% were drivers
- Persons aged 25-34 years old had more deaths (18.3%) due to motor vehicle incidents than any other age group, but males 85+ years had the highest rate of death (37.4 deaths per 100,000)
- Black males had the highest rate of fatal motor vehicle collisions (25.7 per 100,000)
- Thirty-six children under the age of 15 years died in motor vehicle-related incidents

Figure 4.1 Number and Rate of Motor Vehicle Deaths by Year, 2003-2021

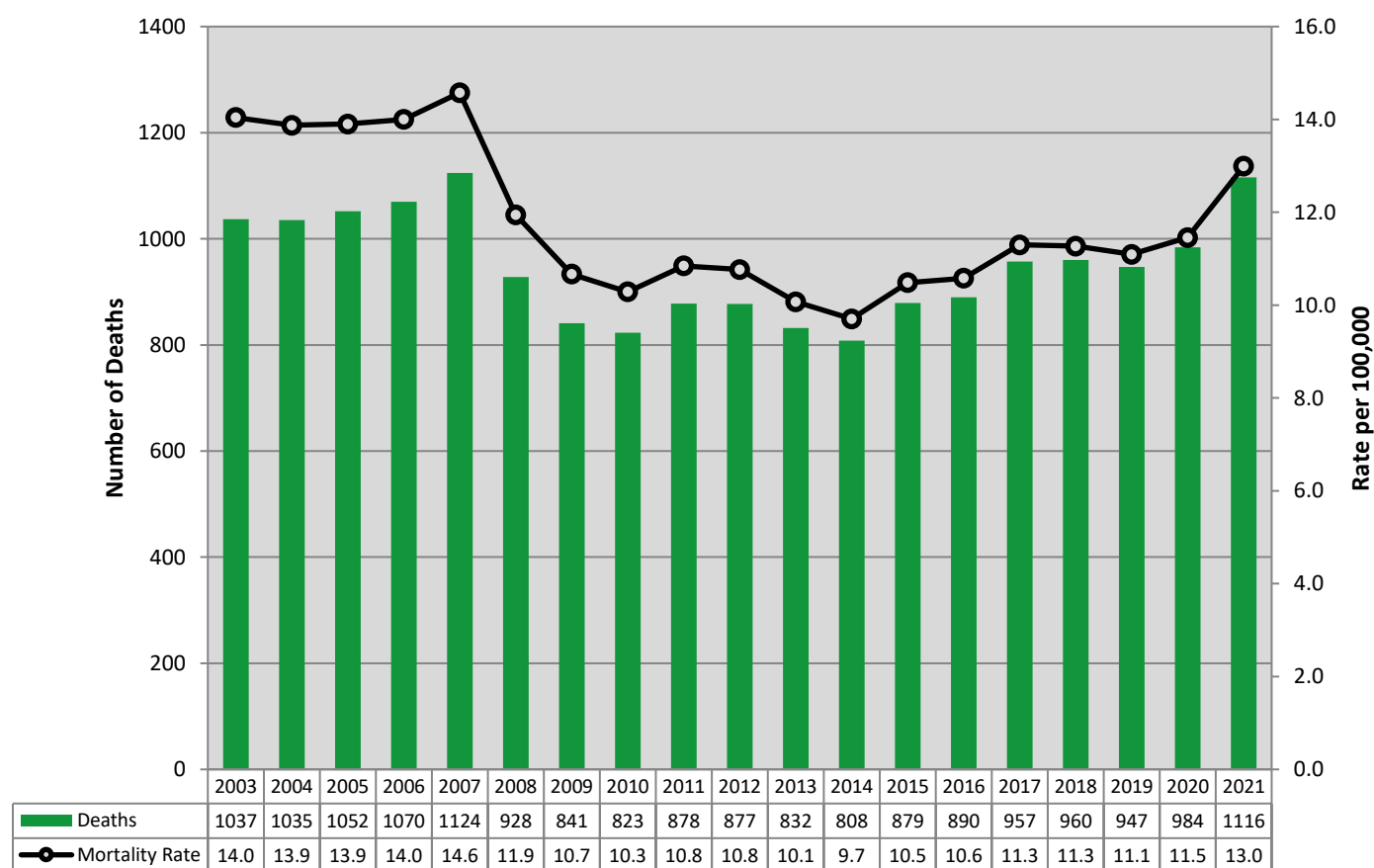
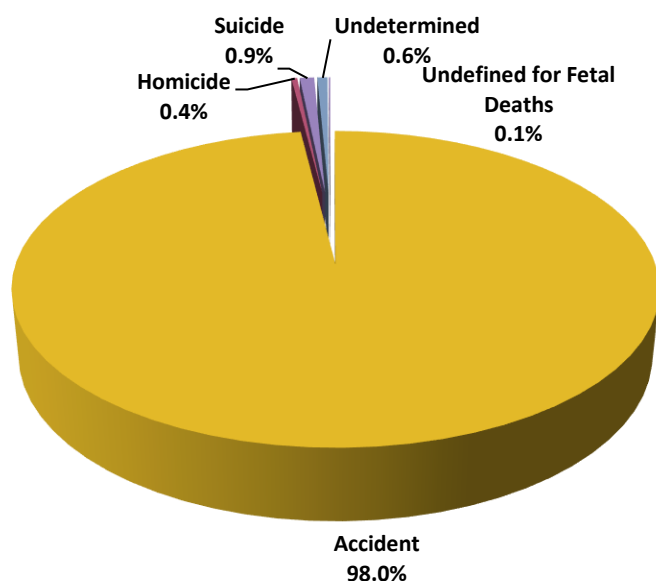
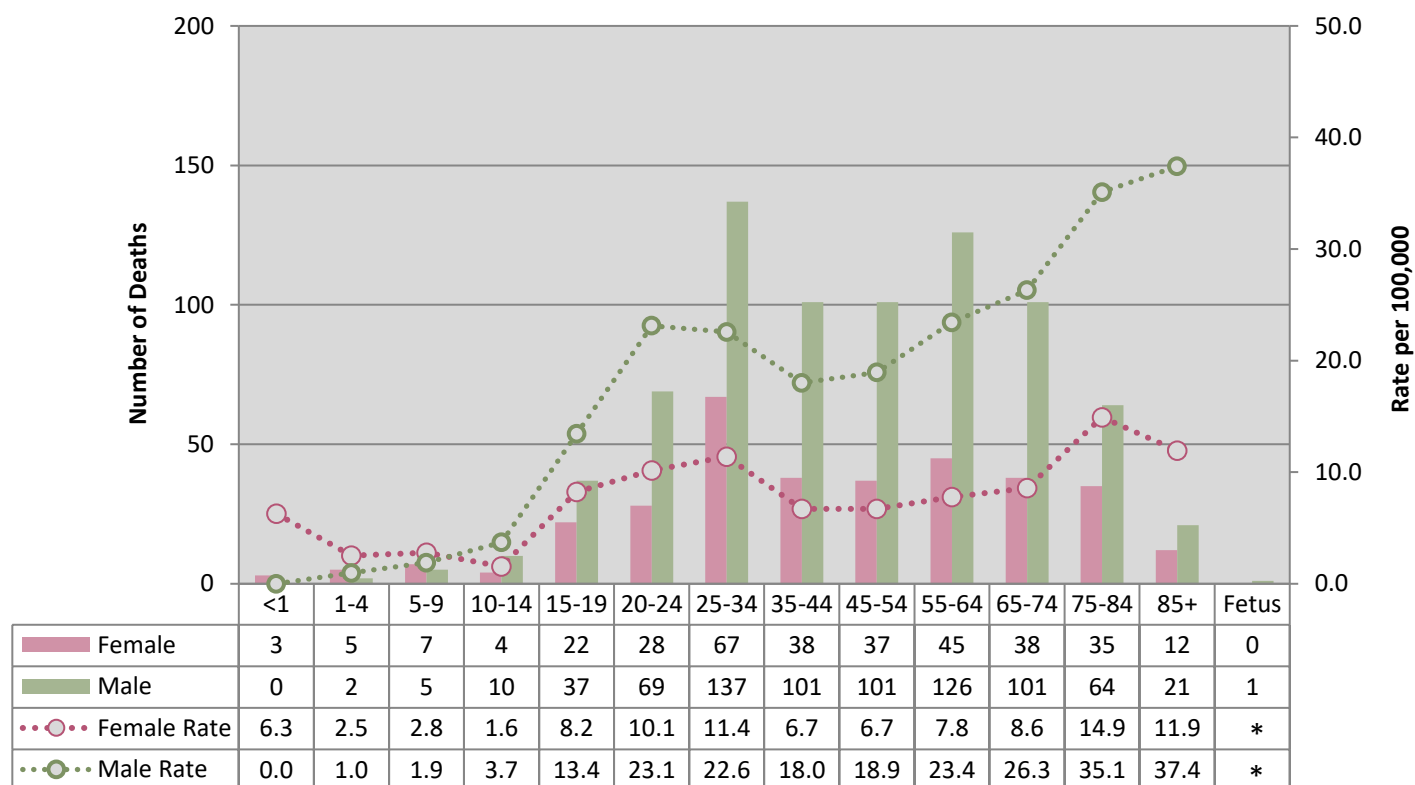


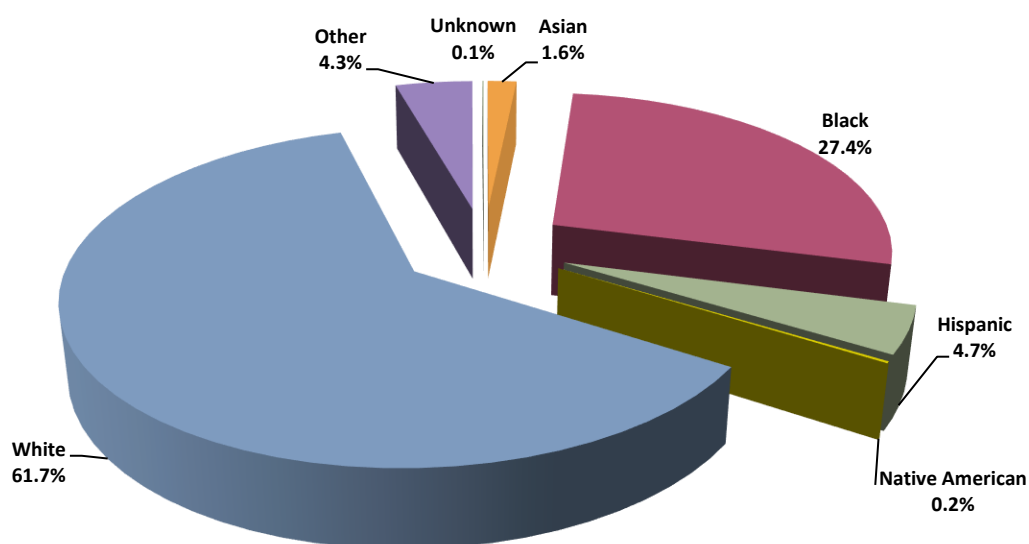
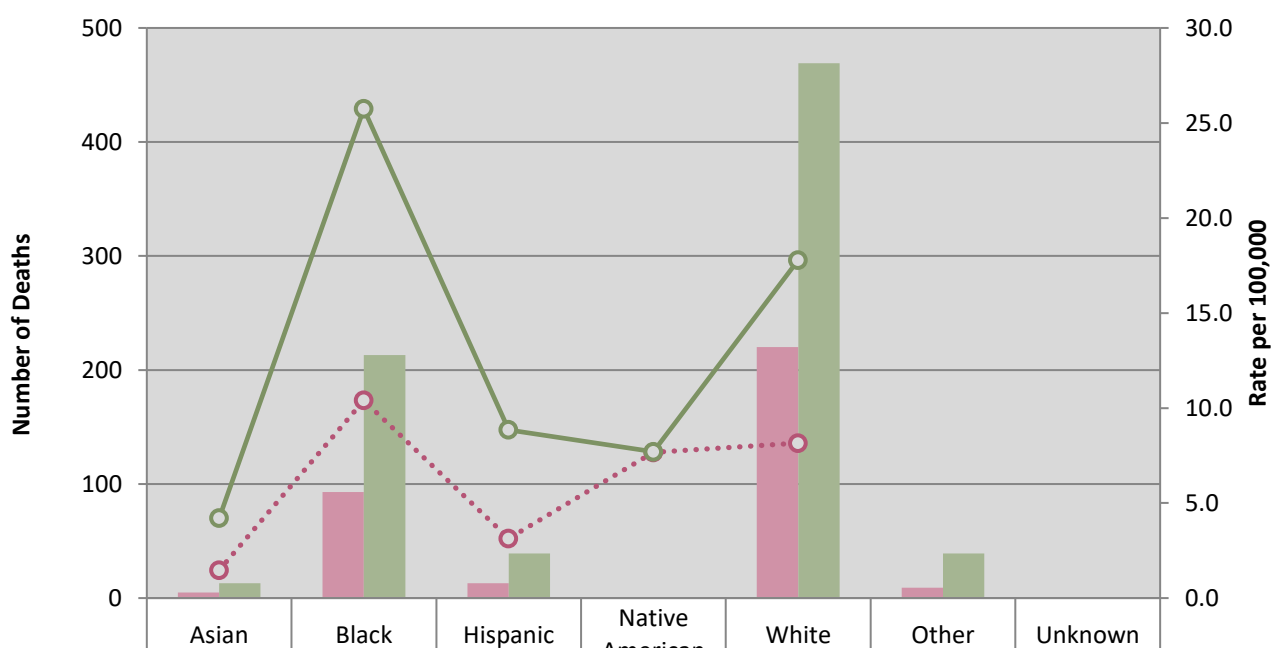
Figure 4.2 Percentage of Motor Vehicle Deaths by Manner, 2021

* Fetal deaths are omitted from manner of death classifications. This is because fetal deaths are not given a certification of live birth in Virginia and thus, do not receive a death certificate. In 2021, the OCME accepted fourteen fetal deaths under OCME jurisdiction of the 3,462 total fetal deaths reported to Vital

Figure 4.3 Number and Rate of Motor Vehicle Deaths by Age Group and Gender, 2021

* No rate can be calculated

* * Fetal deaths are omitted from manner of death classifications. This is because fetal deaths are not given a certification of live birth in Virginia and thus, do not receive a death certificate. In 2020, the OCME accepted nine fetal deaths under OCME jurisdiction of the 3,411 total fetal deaths reported to Vital Records

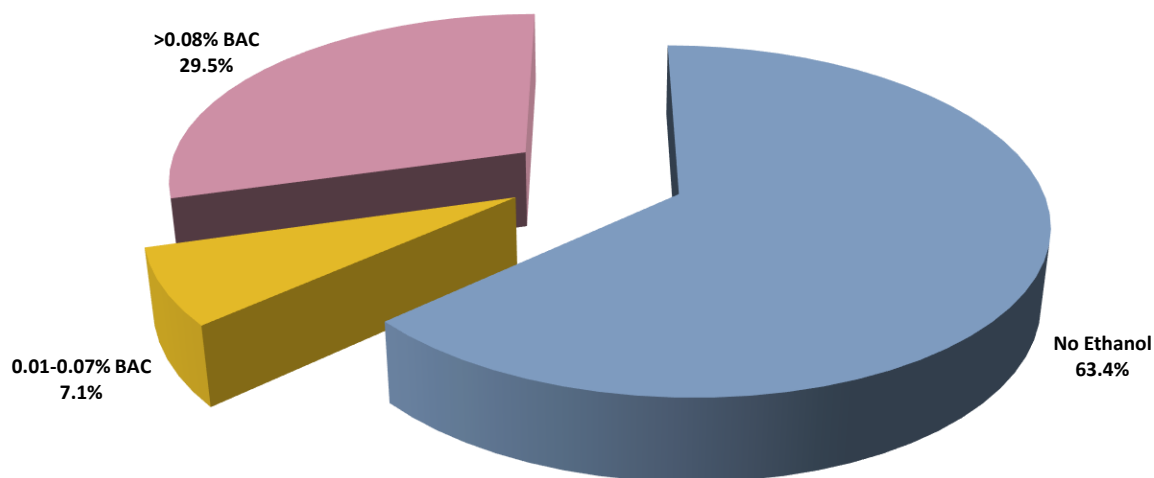
Figure 4.4 Percentage of Motor Vehicle Deaths by Race/Ethnicity, 2021**Figure 4.5 Number and Rate of Motor Vehicle Deaths by Race/Ethnicity and Gender, 2021**

Female	5	93	13	1	220	9	0
Male	13	213	39	1	469	39	1
Female Rate	1.5	10.4	3.1	7.7	8.1	*	*
Male Rate	4.2	25.7	8.9	7.7	17.8	*	*

*No rate can be calculated

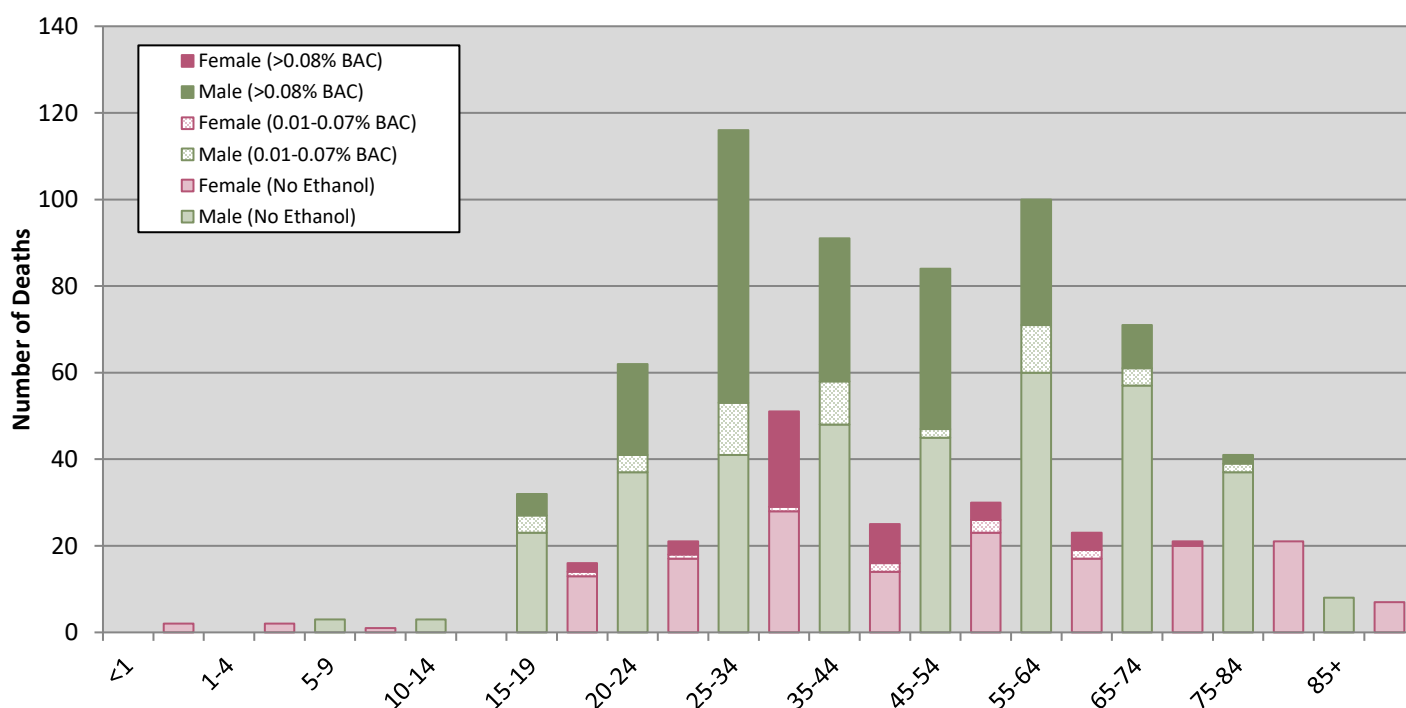
Note: Rates calculated from small case counts (n<5) are considered unreliable and should be interpreted with caution (Native Americans)

Figure 4.6 Percentage of Motor Vehicle Deaths by Ethanol Amount (N=831), 2021

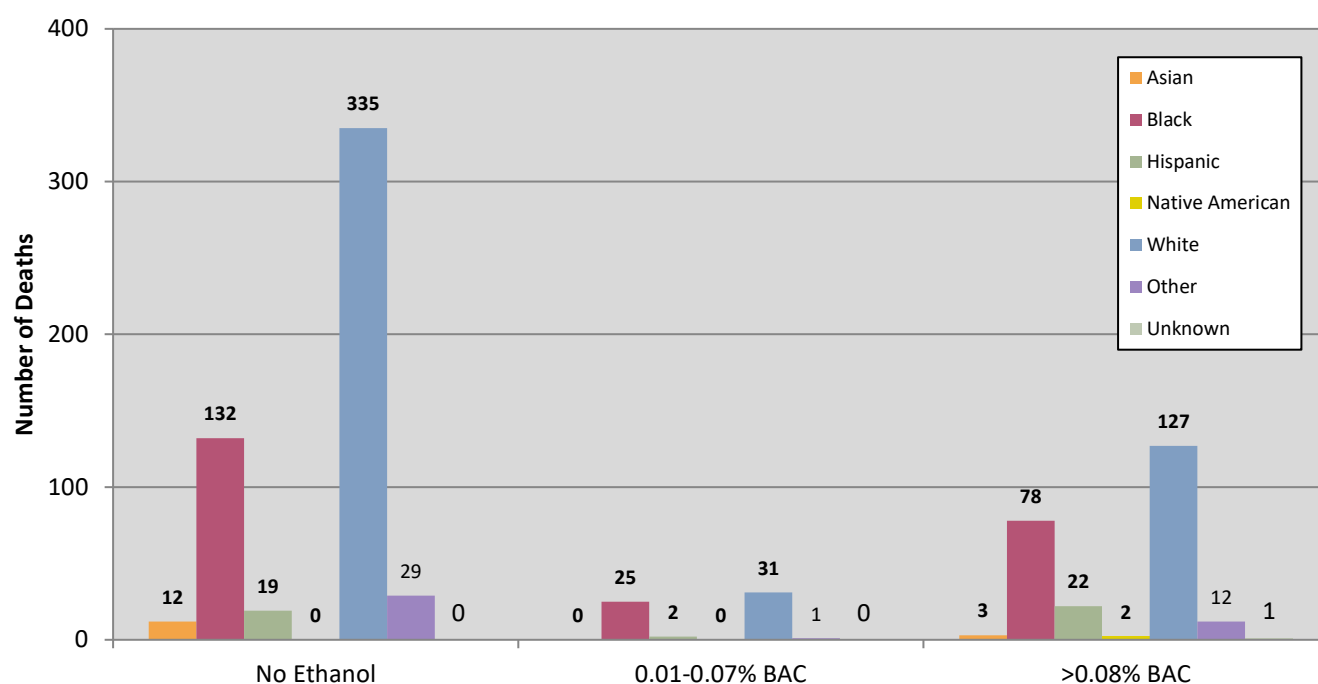


Note: Of the 1,116 motor vehicle deaths, 25.5% (n=285) did not receive toxicology testing

Figure 4.7 Number of Motor Vehicle Deaths by Age Group, Gender, and Ethanol Amount (N=831), 2021



Note: Of the 1,116 motor vehicle deaths, 25.5% (n=285) did not receive toxicology testing

Figure 4.8 Number of Motor Vehicle Deaths by Ethanol Level and Race/Ethnicity (N=831), 2021

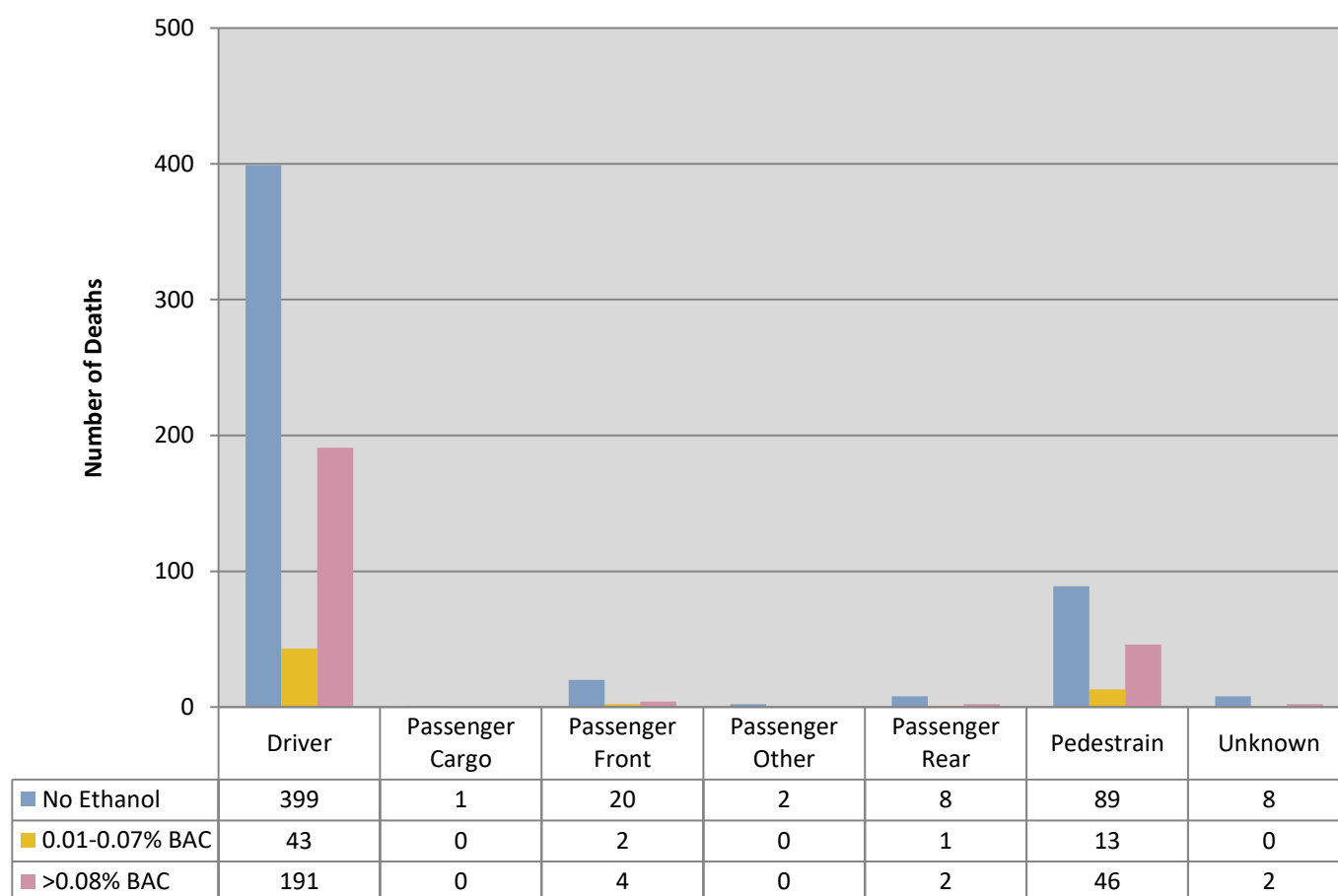
Note: Of the 1,116 motor vehicle deaths, 25.5% (n=285) did not receive toxicology testing

Table 4.1 Number of Motor Vehicle Deaths by Age Group and Position during Collision, 2021

Age Group (years)	Driver	Passenger Cargo	Passenger Front	Passenger Other	Passenger Rear	Pedestrian	Unknown	Total
<1	0	0	0	1	1	0	1	3
1-4	0	0	2	0	2	3	0	7
5-9	1	0	0	2	7	2	0	12
10-14	0	0	4	0	6	4	0	14
15-19	38	0	8	0	9	1	3	59
20-24	73	1	9	0	6	7	1	97
25-34	154	0	27	0	3	18	2	204
35-44	103	0	13	0	1	20	2	139
45-54	84	0	13	0	2	38	1	138
55-64	109	0	15	1	3	38	5	171
65-74	83	0	13	1	2	35	5	139
75-84	68	0	8	0	6	13	4	99
85+	24	0	3	0	1	5	0	33
Fetus	0	0	0	1	0	0	0	1
TOTAL	737	1	115	6	49	184	24	1116

* Fetal deaths are omitted from manner of death classifications. This is because fetal deaths are not given a certification of live birth in Virginia and thus, do not receive a death certificate. In 2021, the OCME accepted fourteen fetal deaths under OCME jurisdiction of the 3,462 total fetal deaths reported to Vital Records

**Figure 4.9 Number of Motor Vehicle Deaths by Position during Collision and Ethanol Level
(N=831), 2021**



Note: Of the 1,116 motor vehicle deaths, 25.5% (n=285) did not receive toxicology testing

Table 4.2 Number of Motor Vehicle Deaths by Position during Collision, Vehicle Type, and Ethanol Level (N=831), 2021

Position During Collision	Vehicle Type	No Ethanol	0.01-0.07% BAC	>0.08% BAC	Total
Driver	Aircraft	1	0	0	1
	All Terrain Vehicle	4	1	7	12
	Bicycle	11	1	2	14
	Boat	0	1	0	1
	Car	167	22	87	276
	Construction Heavy Equipment	1	0	0	1
	Dump Truck	1	0	0	1
	Farm Equipment	1	0	0	1
	Mo-Ped	9	0	5	14
	Motorcycle	54	6	29	89
	Pickup Truck	43	4	16	63
	Scooter	1	0	0	1
	Sport Utility Vehicle	63	7	33	103
	Tractor Trailer	9	0	1	10
	Truck Other	8	1	1	10
	Unknown	8	0	6	14
	Van	18	0	4	22
	Subtotal	399	43	191	633
Passenger Cargo	Car	1	0	0	1
	Subtotal	1	0	0	1
Passenger Front	Car	12	1	3	16
	Pickup Truck	0	0	1	1
	Sport Utility Vehicle	7	1	0	8
	Tractor Trailer	1	0	0	1
	Subtotal	20	2	4	26
Passenger Other	All Terrain Vehicle	1			1
	Car	1			1
	Subtotal	2	0	0	2
Passenger Rear	Car	7	0	2	9
	Sport Utility Vehicle	1	1	0	2
	Subtotal	8	1	2	11
Pedestrian	Bicycle	1	0	0	1
	Bus	0	0	1	1
	Car	28	4	16	48
	Construction Heavy Equipment	3	0	0	3
	Motorcycle	2	0	1	3
	Multiple	1	0	1	2

	Pickup Truck	17	2	1	20
	Sport Utility Vehicle	9	3	16	28
	Tractor Trailer	2	0	2	4
	Train	7	1	2	10
	Truck Other	4	1	0	5
	Unknown	11	1	5	17
	Van	4	1	1	6
	Subtotal	89	13	46	148
Unknown	Car	5		2	7
	Farm Equipment	1		0	1
	Unknown	2		0	2
	Subtotal	8	0	2	10

Note: Of the 1,116 motor vehicle deaths, 25.5% (n=285) did not receive toxicology testing

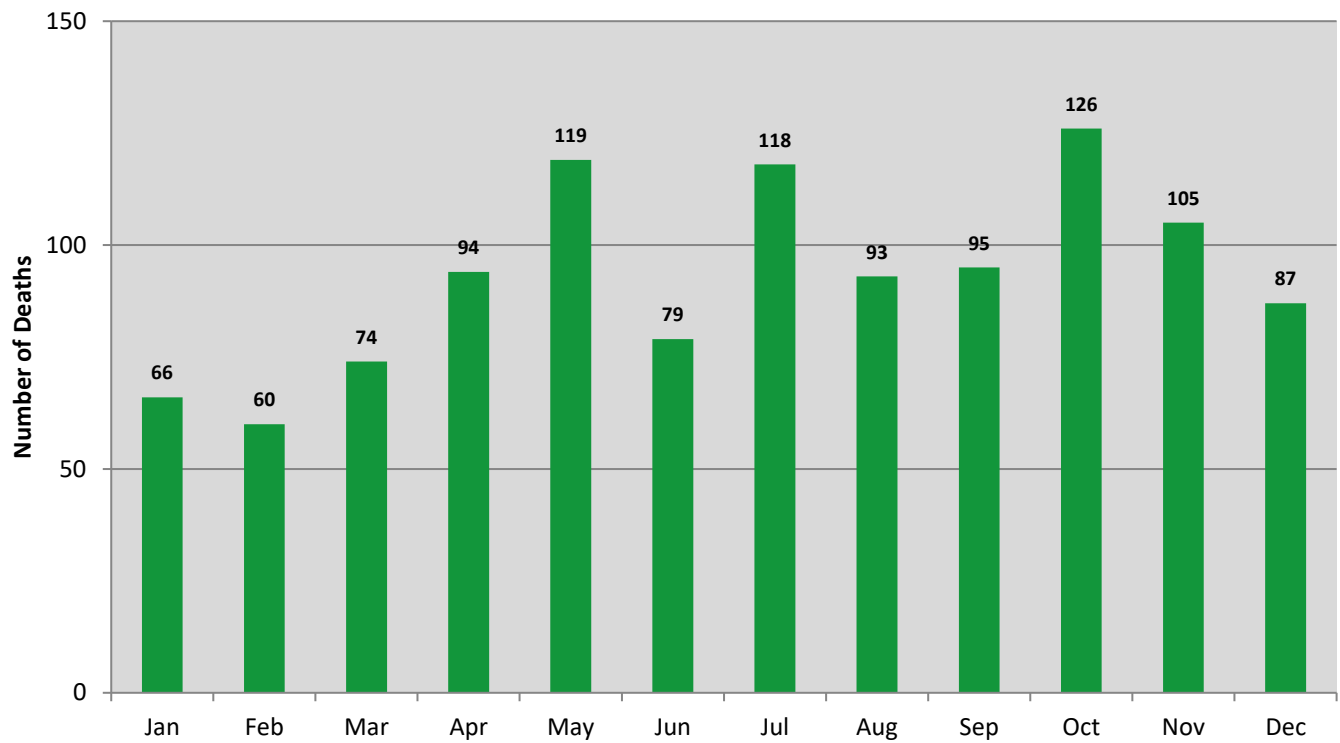
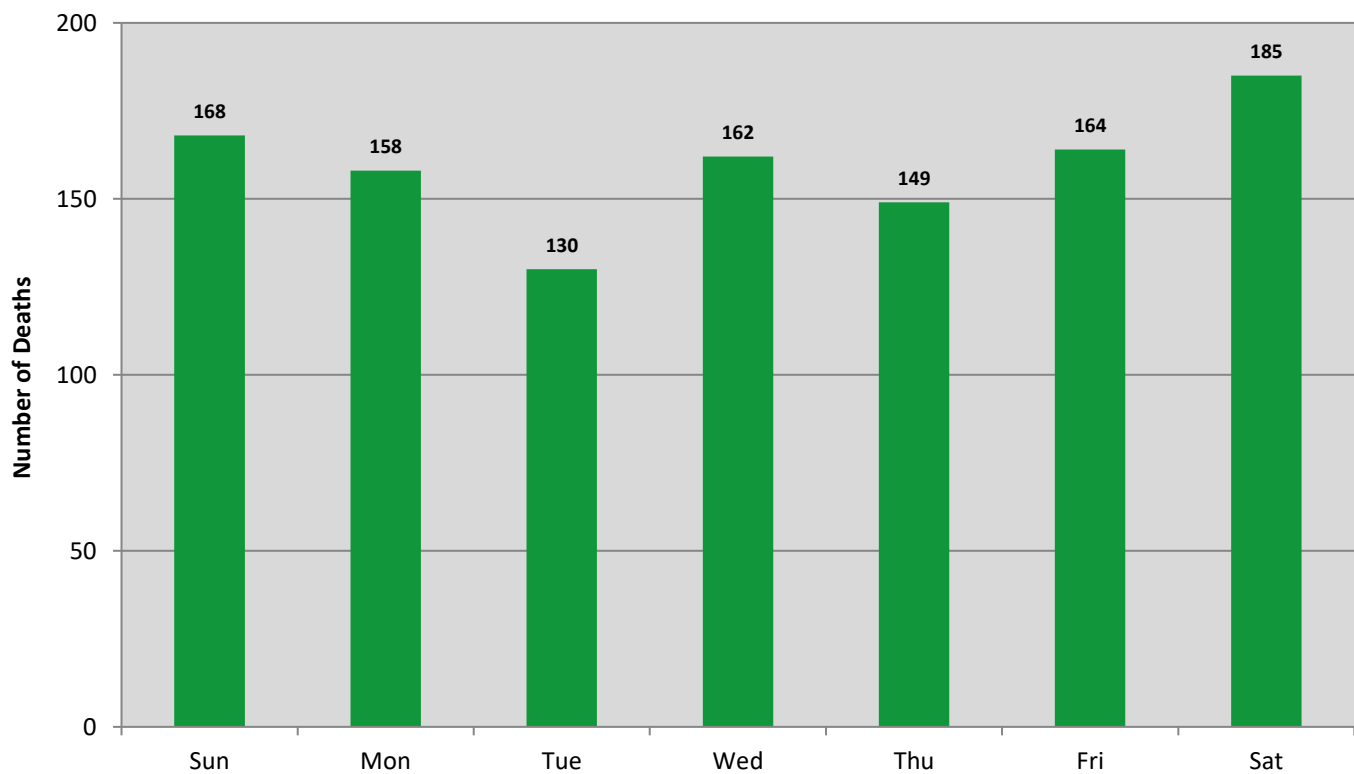
Figure 4.10 Number of OCME Motor Vehicle Fatalities by Month of Death, 2021**Figure 4.11 Number of OCME Motor Vehicle Fatalities by Day of Week, 2021**

Table 4.3 Number and Rate of Motor Vehicle Deaths by Locality of Residence, 2021

Locality of Residence	Deaths	Rate
Accomack County	6	18.6
Albemarle County	12	10.8
Alexandria City	10	6.3
Alleghany County	2	13.6
Amelia County	3	23.1
Amherst County	6	18.9
Appomattox County	5	31.2
Arlington County	4	1.7
Augusta County	18	23.5
Bath County	0	0.0
Bedford County	17	21.3
Bland County	0	0.0
Botetourt County	6	17.8
Bristol City	0	0.0
Brunswick County	2	12.5
Buchanan County	4	19.4
Buckingham County	7	40.8
Buena Vista City	4	62.5
Campbell County	10	18.1
Caroline County	8	25.9
Carroll County	5	16.6
Charles City County	2	29.3
Charlotte County	8	67.7
Charlottesville City	5	10.6
Chesapeake City	20	8.1
Chesterfield County	31	8.7
Clarke County	2	13.7
Colonial Heights City	2	11.6
Covington City	0	0.0
Craig County	0	0.0
Culpeper County	9	16.8
Cumberland County	1	10.1
Danville City	6	15.0
Dickenson County	1	7.1
Dinwiddie County	13	45.3
Emporia City	2	38.0
Essex County	6	54.8
Fairfax City	3	12.8
Fairfax County	38	3.3

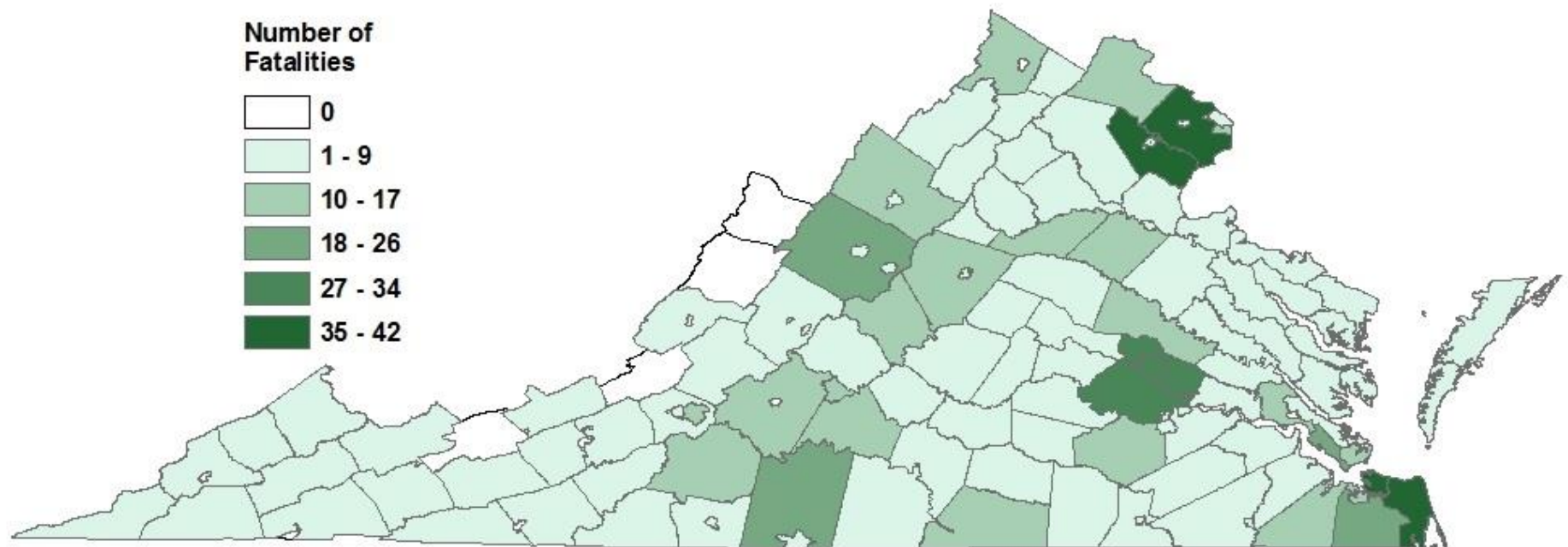
Locality of Residence	Deaths	Rate
Falls Church City	0	0.0
Fauquier County	4	5.6
Floyd County	3	19.0
Fluvanna County	3	10.9
Franklin City	2	25.5
Franklin County	11	19.6
Frederick County	11	12.1
Fredericksburg City	5	17.0
Galax City	0	0.0
Giles County	6	36.0
Gloucester County	5	13.3
Goochland County	4	16.4
Grayson County	3	19.4
Greene County	1	5.0
Greensville County	9	79.8
Halifax County	9	26.8
Hampton City	16	11.8
Hanover County	12	11.1
Harrisonburg City	4	7.5
Henrico County	26	7.8
Henry County	7	13.9
Highland County	0	0.0
Hopewell City	4	17.9
Isle of Wight County	8	21.2
James City County	11	14.2
King and Queen County	4	57.6
King George County	2	7.3
King William County	9	51.0
Lancaster County	5	47.1
Lee County	1	4.3
Lexington City	2	27.5
Loudoun County	12	2.8
Louisa County	8	21.0
Lunenburg County	5	40.8
Lynchburg City	11	13.5
Madison County	1	7.5
Manassas City	3	7.3
Manassas Park City	1	5.6
Martinsville City	4	32.4

Locality of Residence	Deaths	Rate
Mathews County	1	11.4
Mecklenburg County	10	32.6
Middlesex County	4	37.8
Montgomery County	5	5.1
Nelson County	10	67.8
New Kent County	3	12.7
Newport News City	22	12.3
Norfolk City	38	15.7
Northampton County	5	42.8
Northumberland County	2	16.6
Norton City	0	0.0
Nottoway County	6	39.6
Orange County	13	34.5
Page County	3	12.5
Patrick County	4	22.9
Petersburg City	6	19.7
Pittsylvania County	19	31.7
Poquoson City	1	8.2
Portsmouth City	15	15.8
Powhatan County	9	29.9
Prince Edward County	6	26.1
Prince George County	2	5.2
Prince William County	42	8.8
Pulaski County	4	11.8
Radford City	0	0.0
Rappahannock County	1	13.8
Richmond City	30	12.9
Richmond County	4	44.1
Roanoke City	17	17.2
Roanoke County	9	9.5
Rockbridge County	2	8.8
Rockingham County	10	12.1
Russell County	5	18.8
Salem City	1	3.9
Scott County	1	4.6
Shenandoah County	5	11.4
Smyth County	3	10.0
Southampton County	4	22.7
Spotsylvania County	15	10.8
Stafford County	7	4.5
Staunton City	1	4.0

Locality of Residence	Deaths	Rate
Suffolk City	14	14.9
Surry County	2	31.3
Sussex County	6	54.9
Tazewell County	5	12.3
Virginia Beach City	37	8.2
Warren County	5	12.4
Washington County	5	9.3
Waynesboro City	4	17.6
Westmoreland County	7	38.6
Williamsburg City	0	0.0
Winchester City	0	0.0
Wise County	1	2.7
Wythe County	4	14.0
York County	7	10.1
<i>Subtotal (in-state)</i>	952	11.1
Out of State	156	ND
Unknown	8	ND
<i>Subtotal (out-of-state)</i>	164	ND
TOTAL	1116	13.0

Note: No denominator is represented by ND

Map 4.1 Number of Motor Vehicle Fatalities by Locality of Residence, 2021



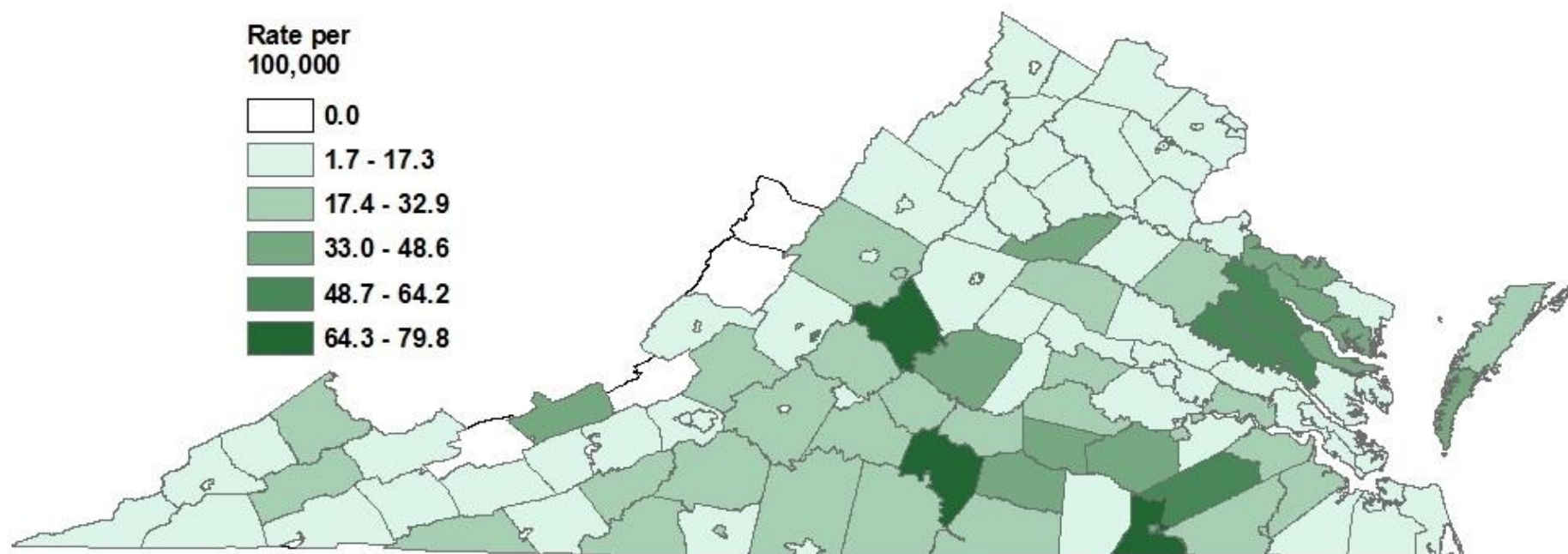
Map 4.2 Rate of Motor Vehicle Fatalities by Locality of Residence, 2021

Table 4.4 Number and Rate of Motor Vehicle Deaths by Locality of Injury, 2021

Locality of Injury	Deaths	Rate
Accomack County	7	21.7
Albemarle County	19	17.2
Alexandria City	7	4.4
Alleghany County	5	34.0
Amelia County	2	15.4
Amherst County	6	18.9
Appomattox County	5	31.2
Arlington County	7	2.9
Augusta County	21	27.4
Bath County	0	0.0
Bedford County	19	23.8
Bland County	0	0.0
Botetourt County	11	32.7
Bristol City	1	5.8
Brunswick County	12	74.8
Buchanan County	3	14.6
Buckingham County	6	34.9
Buena Vista City	0	0.0
Campbell County	12	21.7
Caroline County	11	35.6
Carroll County	7	23.3
Charles City County	3	44.0
Charlotte County	5	42.3
Charlottesville City	2	4.3
Chesapeake City	27	10.9
Chesterfield County	27	7.5
Clarke County	2	13.7
Colonial Heights City	4	23.2
Covington City	0	0.0
Craig County	1	19.7
Culpeper County	7	13.1
Cumberland County	5	50.3
Danville City	9	22.6
Dickenson County	1	7.1
Dinwiddie County	13	45.3
Emporia City	1	19.0
Essex County	5	45.7
Fairfax City	1	4.3
Fairfax County	65	5.6
Falls Church City	0	0.0
Fauquier County	12	16.8
Floyd County	4	25.4
Fluvanna County	3	10.9

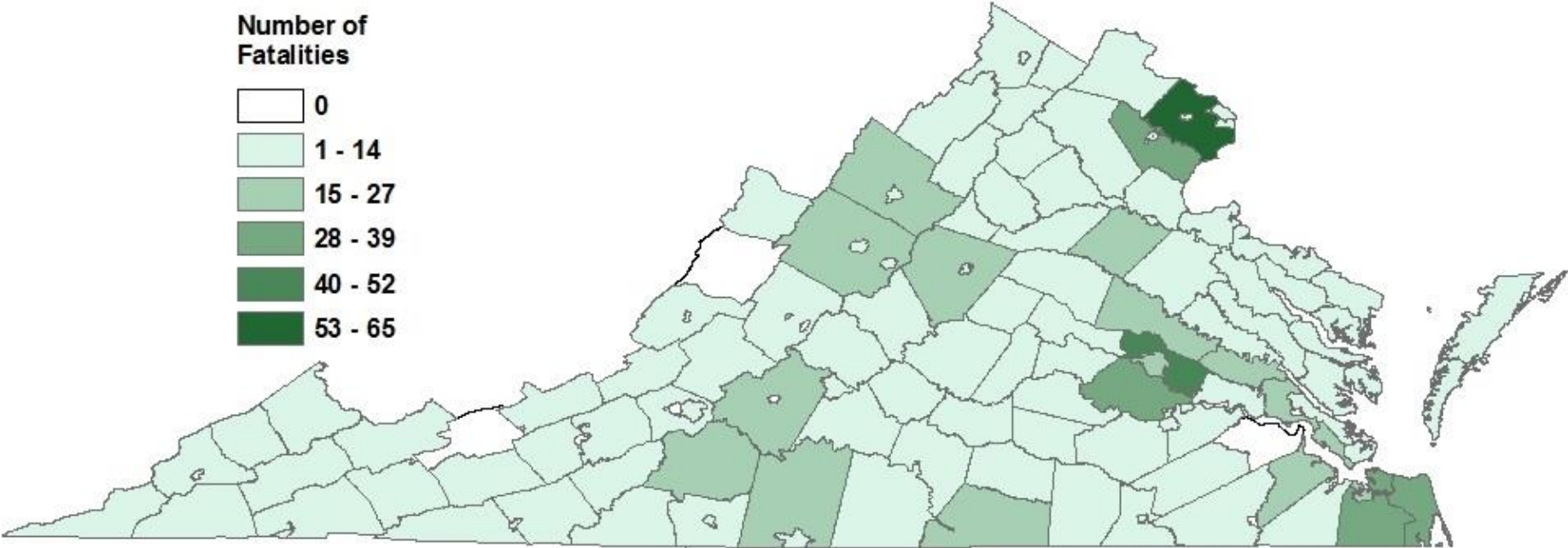
Locality of Injury	Deaths	Rate
Franklin City	0	0.0
Franklin County	14	24.9
Frederick County	10	11.0
Fredericksburg City	5	17.0
Galax City	1	15.9
Giles County	8	48.0
Gloucester County	5	13.3
Goochland County	3	12.3
Grayson County	2	12.9
Greene County	2	9.9
Greensville County	13	115.2
Halifax County	7	20.8
Hampton City	13	9.6
Hanover County	24	22.2
Harrisonburg City	1	1.9
Henrico County	41	12.3
Henry County	9	17.9
Highland County	1	45.5
Hopewell City	4	17.9
Isle of Wight County	14	37.1
James City County	14	18.0
King and Queen County	7	100.8
King George County	6	21.9
King William County	3	17.0
Lancaster County	5	47.1
Lee County	1	4.3
Lexington City	1	13.7
Loudoun County	9	2.1
Louisa County	10	26.2
Lunenburg County	3	24.5
Lynchburg City	10	12.3
Madison County	1	7.5
Manassas City	1	2.4
Manassas Park City	1	5.6
Martinsville City	2	16.2
Mathews County	2	22.8
Mecklenburg County	15	48.9
Middlesex County	3	28.4
Montgomery County	6	6.1
Nelson County	11	74.6
New Kent County	15	63.4
Newport News City	17	9.5
Norfolk City	32	13.2

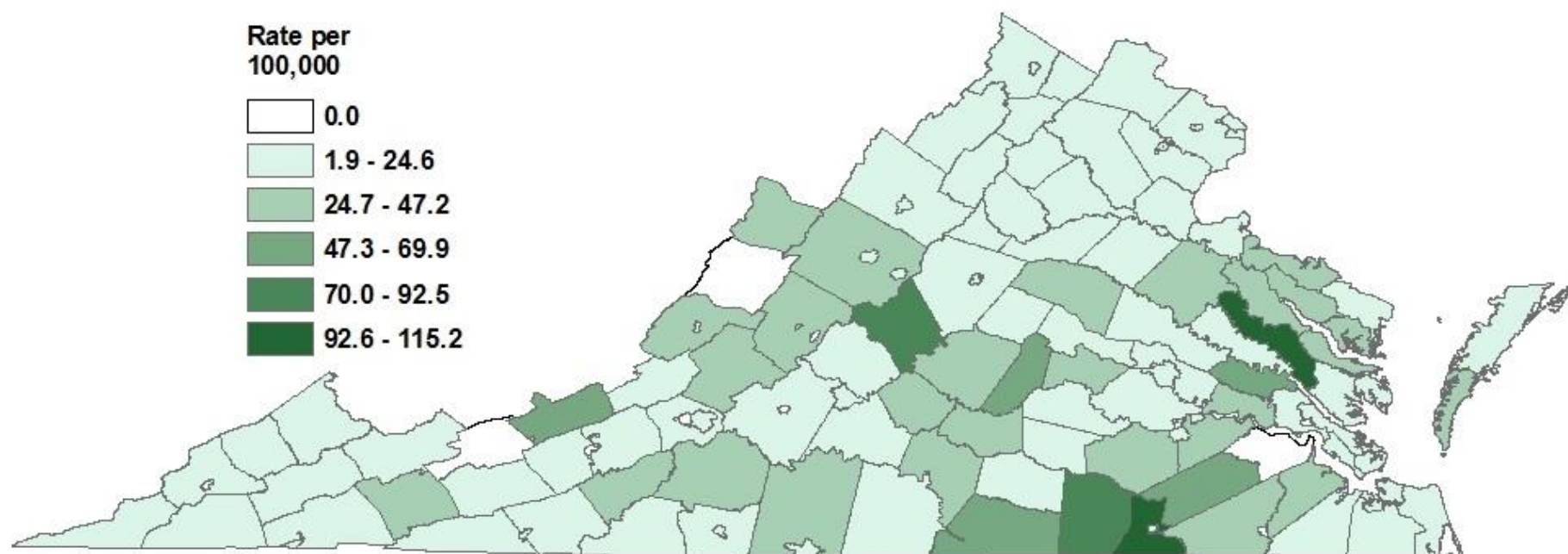
Locality of Injury	Deaths	Rate
Northampton County	5	42.8
Northumberland County	2	16.6
Norton City	0	0.0
Nottoway County	3	19.8
Orange County	7	18.6
Page County	3	12.5
Patrick County	3	17.1
Petersburg City	6	19.7
Pittsylvania County	16	26.7
Poquoson City	1	8.2
Portsmouth City	14	14.7
Powhatan County	9	29.9
Prince Edward County	8	34.8
Prince George County	11	28.4
Prince William County	34	7.1
Pulaski County	4	11.8
Radford City	0	0.0
Rappahannock County	1	13.8
Richmond City	23	9.9
Richmond County	3	33.1
Roanoke City	13	13.1
Roanoke County	10	10.6
Rockbridge County	8	35.2
Rockingham County	16	19.4
Russell County	5	18.8
Salem City	0	0.0
Scott County	2	9.2
Shenandoah County	6	13.7

Locality of Injury	Deaths	Rate
Smyth County	8	26.6
Southampton County	8	45.4
Spotsylvania County	15	10.8
Stafford County	13	8.3
Staunton City	1	4.0
Suffolk City	13	13.8
Surry County	0	0.0
Sussex County	6	54.9
Tazewell County	7	17.3
Virginia Beach City	35	7.8
Warren County	7	17.3
Washington County	8	14.9
Waynesboro City	3	13.2
Westmoreland County	5	27.5
Williamsburg City	0	0.0
Winchester City	1	3.6
Wise County	2	5.4
Wythe County	7	24.5
York County	8	11.6
Subtotal (in-state)	1070	12.5
Out of State	34	ND
Unknown	12	ND
Subtotal (out-of-state)	46	ND
TOTAL	1116	13.0

Note: No denominator is represented by ND

Map 4.3 Number of Motor Vehicle Fatalities by Locality of Injury, 2021



Map 4.4 Rate of Motor Vehicle Fatalities by Locality of Injury, 2021

SECTION 5: DRUG/POISON DEATHS (N=2,669)

ALL DRUG/POISON DEATHS (N=2,669)

The number of fatal drug overdoses in 2021 increased 15.6% compared to 2020. The number of fatal drug overdoses in 2021 was also the largest number ever seen in Virginia.

- The 2021 rate of drug/poison deaths that occurred in Virginia was 31.1 per 100,000 persons
- The majority were accidents (94.9%), male (69.7%), White (65.8%), and 35-44 years old (24.9%)
- Fentanyl was involved in 76.4% of all drug overdose deaths in 2021
- Black males followed second by White males had the highest rates of fatal overdoses, all substances in 2021 (66.3 and 44.7 per 100,000, respectively)

Figure 5.1 Number and Rate of Fatal Drug/Poison Overdoses by Year of Death, 1999-2021

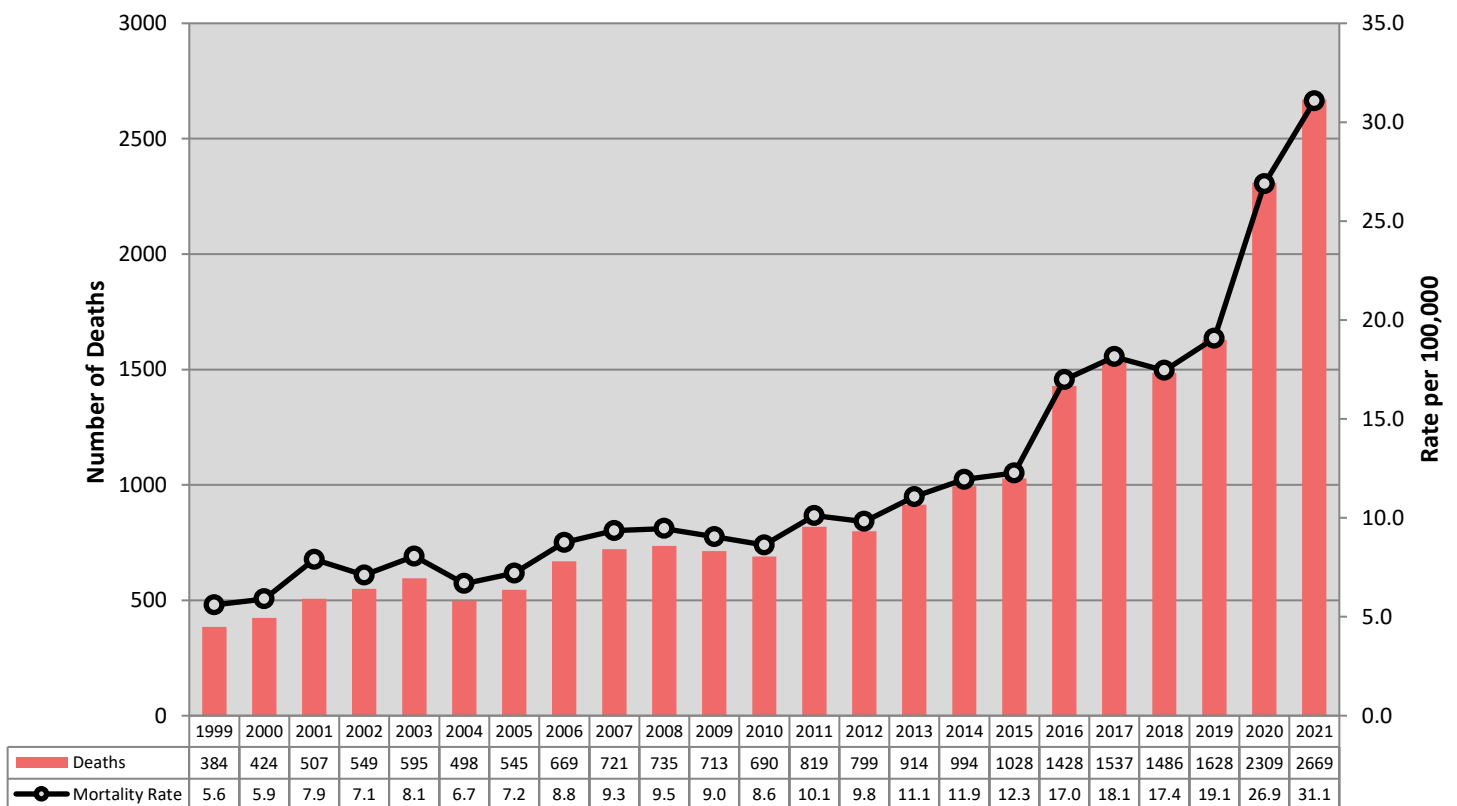


Table 5.1 Number and Percentage of Fatal Drug/Poison Overdoses by OCME District, 2021

OCME District	Number	Percentage
Central	938	35.1%
Northern	522	19.6%
Tidewater	614	23.0%
Western	595	22.3%
TOTAL	2669	100.0%

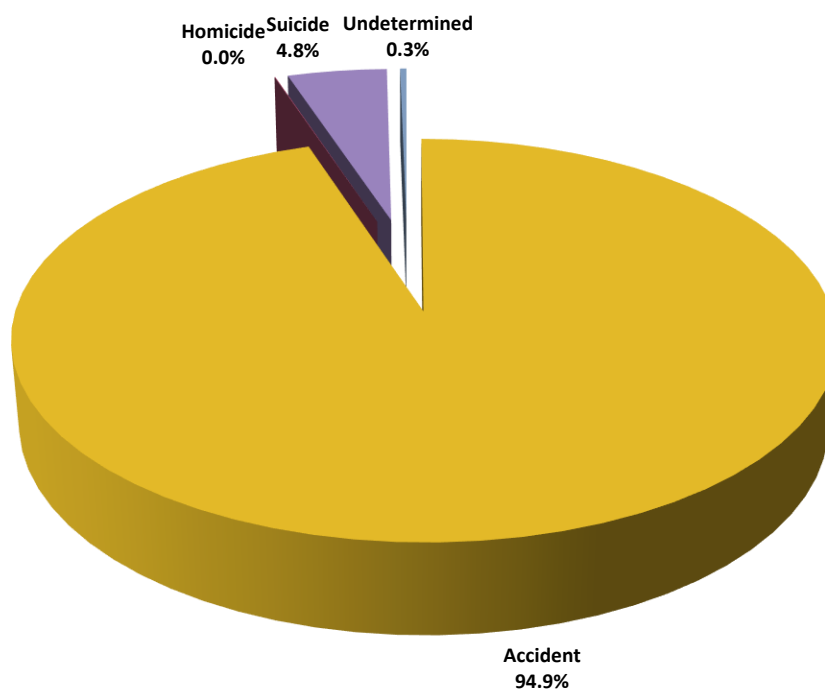
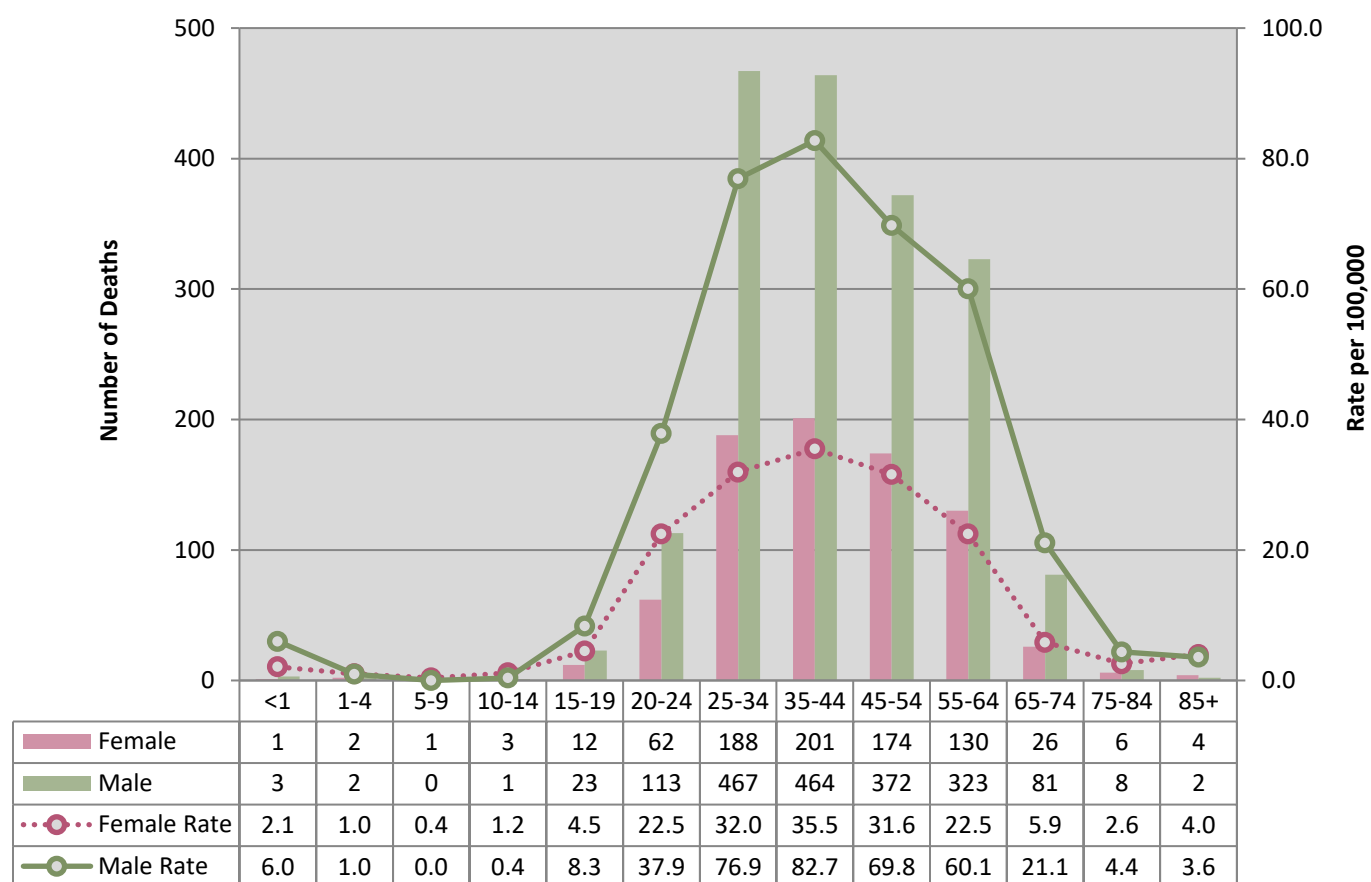
Figure 5.2 Percentage of Fatal Drug/Poison Overdoses by Manner of Death, 2021

Figure 5.3 Number and Rate of Fatal Drug/Poison Overdoses by Age Group and Gender, 2021**Table 5.2 Number of Fatal Drug/Poison Overdoses by Age Group and Manner of Death, 2021**

Age Group (years)	Accident	Homicide	Suicide	Undetermined	Total
<1	0	1	0	3	4
1-4	2	0	0	2	4
5-9	0	0	0	1	1
10-14	2	0	2	0	4
15-19	32	0	3	0	35
20-24	166	0	9	0	175
25-34	632	0	22	1	655
35-44	641	0	24	0	665
45-54	525	0	20	1	546
55-64	427	0	26	0	453
65-74	98	0	9	0	107
75-84	6	0	8	0	14
85+	2	0	4	0	6
Total	2533	1	127	8	2669

Figure 5.4 Percentage of Fatal Drug/Poison Overdoses by Race/Ethnicity, 2021

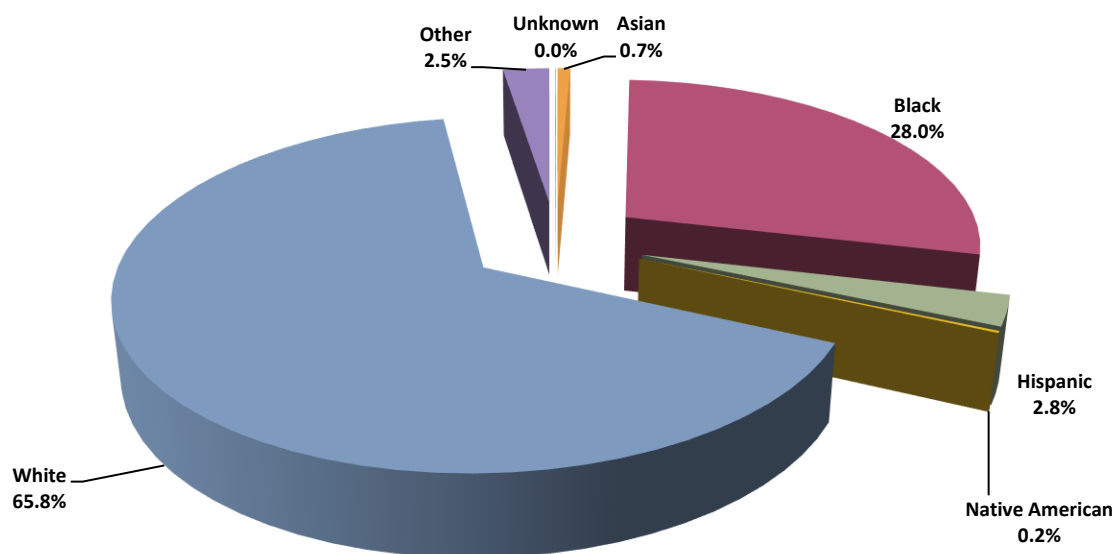
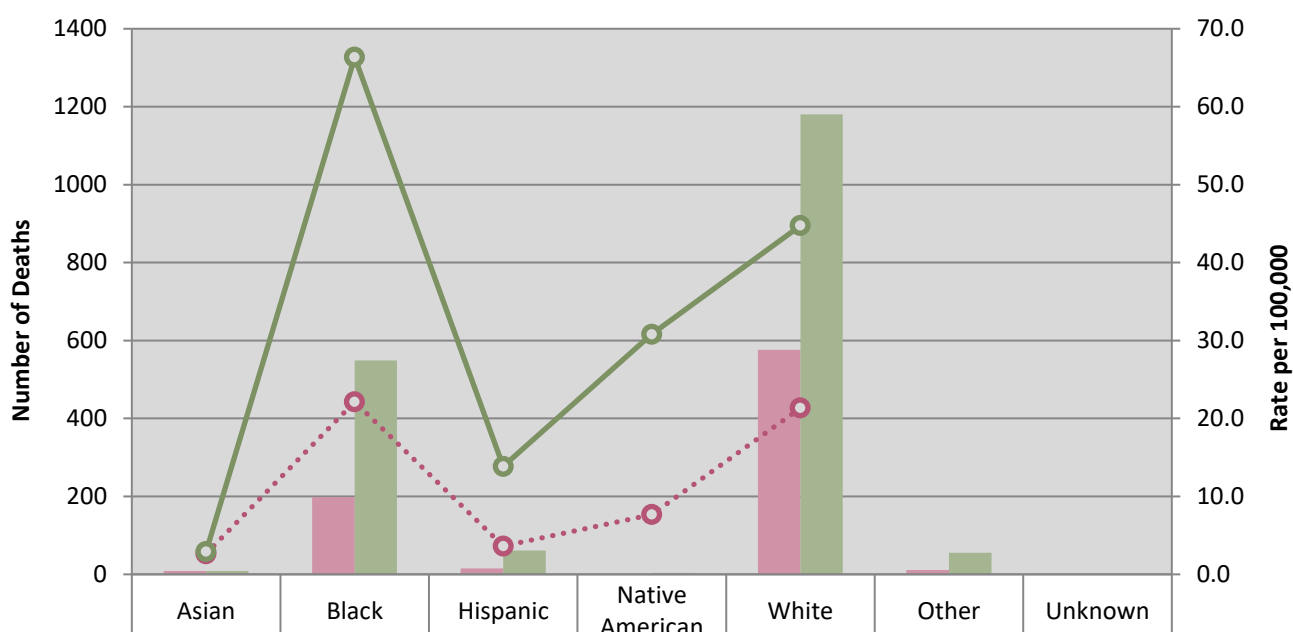


Figure 5.5 Number and Rate of Fatal Drug/Poison Overdoses by Race/Ethnicity and Gender, 2021



	Asian	Black	Hispanic	Native American	White	Other	Unknown
Female	9	198	15	1	576	11	0
Male	9	549	61	4	1180	55	1
Female Rate	2.6	22.1	3.6	7.7	21.3	*	*
Male Rate	2.9	66.3	13.9	30.8	44.7	*	*

*No rate can be calculated

Note: Rates calculated from small case counts (n<5) are considered unreliable and should be interpreted with caution (Asian males and Native Americans)

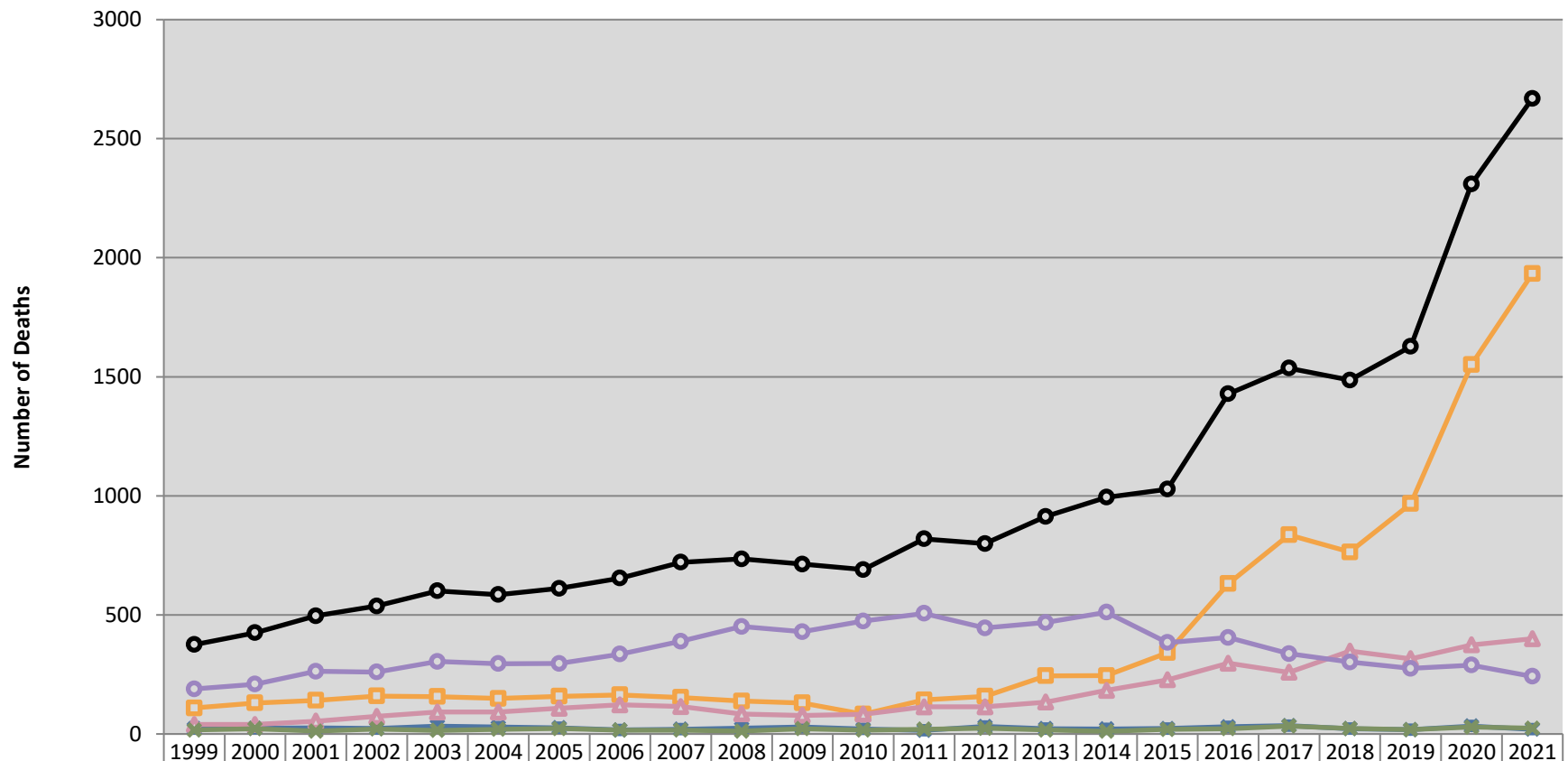
Table 5.3 Number of Fatal Drug/Poison Overdoses by OCME District and Cause of Death, 2021

Cause of Death	Central	Northern	Tidewater	Western	Total
Illegal (street) drug poisoning	810	374	321	428	1933
Mixed drug category	51	104	146	99	400
Prescription drug poisoning	49	25	109	59	242
Drug type not specified	3	0	25	1	29
Over the counter drug poisoning	9	5	7	3	24
Ethanol poisoning	10	6	2	2	20
Inhalant poisoning	4	4	2	2	12
Other poisons (heavy metals, etc.)	1	4	2	1	8
Ethylene glycol poisoning	1	0	0	0	1
Total	938	522	614	595	2669

Table 5.4 Number of Fatal Drug/Poison Overdoses Manner and Cause of Death, 2021

Cause of Death	Accident	Homicide	Suicide	Undetermined	Total
Illegal (street) drug poisoning	1925	1	3	4	1933
Mixed drug category	373	0	26	1	400
Prescription drug poisoning	169	0	70	3	242
Ethanol poisoning	25	0	4	0	29
Over the counter drug poisoning	9	0	15	0	24
Drug type not specified	20	0	0	0	20
Inhalant poisoning	12	0	0	0	12
Other poisons (heavy metals, etc.)	0	0	8	0	8
Ethylene glycol poisoning	0	0	1	0	1
Total	2533	1	127	8	2669

Figure 5.6 Number of Fatal Drug/Poison Overdoses by Drug Category and Year of Death, 1999-2021



■ Ethanol	23	24	26	23	33	29	26	17	20	24	29	21	15	31	22	21	23	30	35	22	18	33	20
■ Illegal	109	130	141	159	157	149	158	164	153	138	130	83	143	158	244	245	341	631	836	764	967	1551	1933
▲ Mixed	40	40	54	74	92	92	108	122	115	84	78	83	114	114	134	183	227	297	259	348	316	374	400
✕ OTC	17	22	12	21	15	20	23	16	16	12	22	16	20	24	17	11	19	22	33	23	18	29	24
○ Prescription	189	209	263	260	304	295	296	335	389	451	429	474	506	445	468	511	384	405	337	302	275	289	242
● All Drug Deaths	375	425	496	537	601	585	611	654	721	735	713	690	819	799	913	994	1028	1428	1536	1486	1627	2309	2669

Note: all other categories of fatal drug overdose were excluded from this analysis because of low annual case counts (<20 deaths)

Figure 5.7 Number of Fatal Drug/Poison Overdoses by Drug Category and Gender, 2021

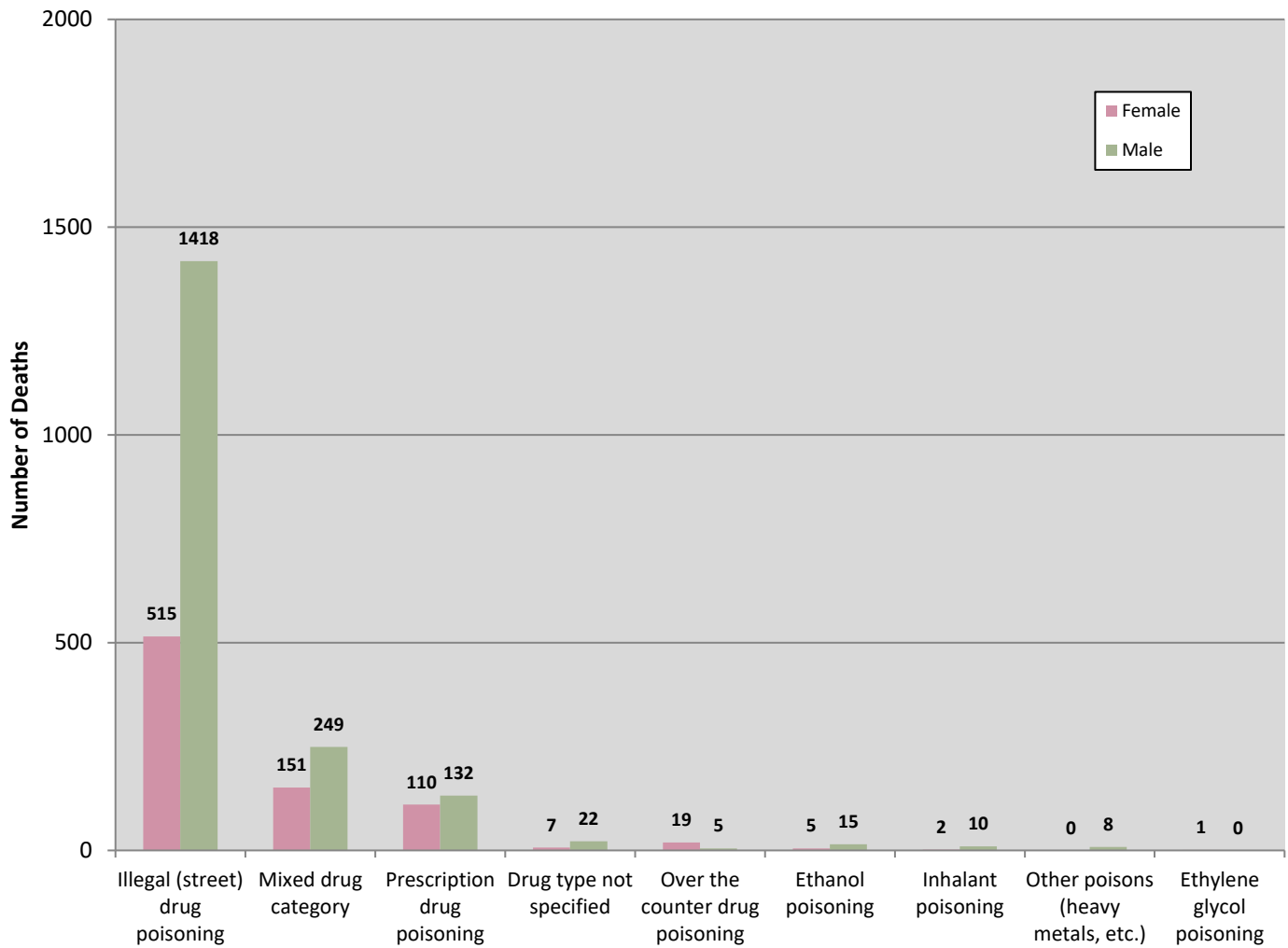
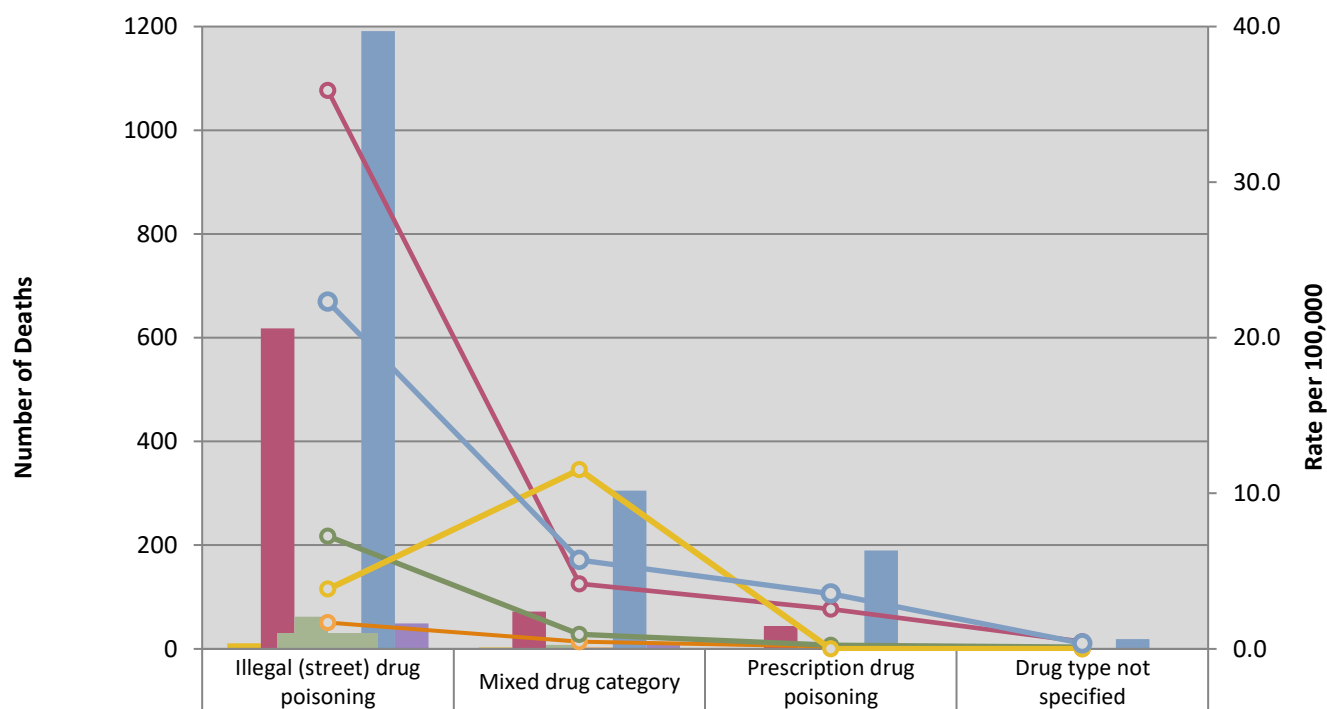
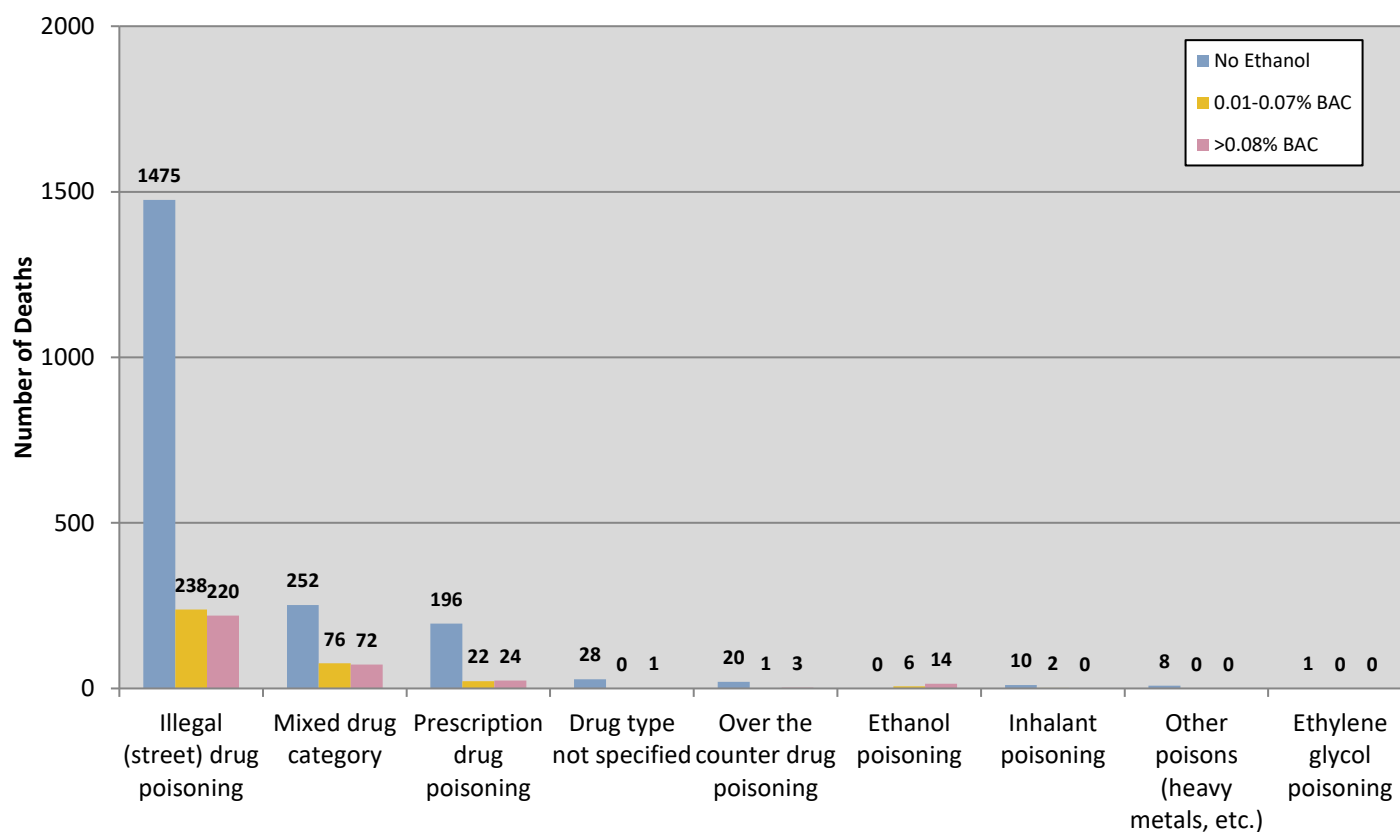


Figure 5.8 Number and Rate of Fatal Drug/Poison Overdoses by Drug Category and Race/Ethnicity, 2021



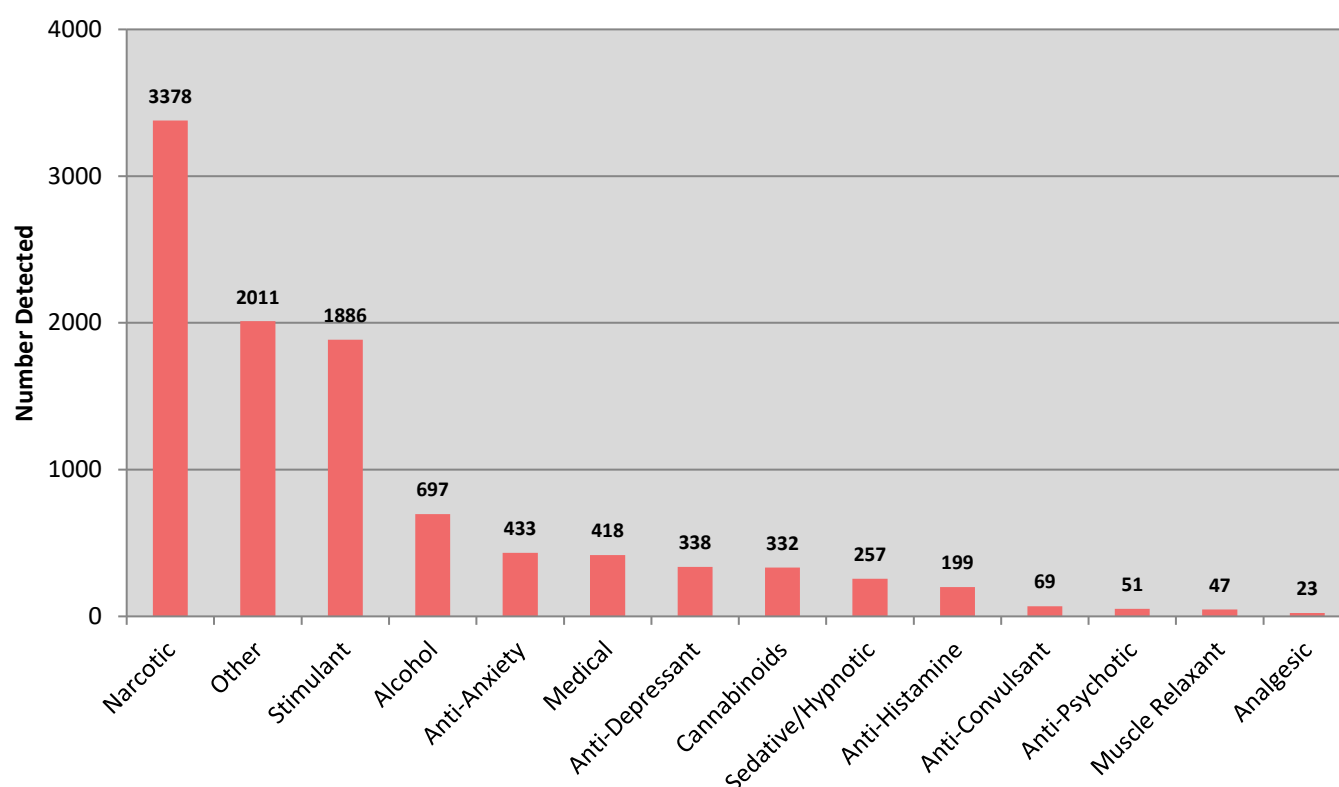
Asian	11	3	1	0
Black	618	72	44	8
Hispanic	62	8	2	1
Native American	1	3	0	0
White	1191	305	190	19
Other	49	9	5	1
Unknown	1	0	0	0
Asian Rate	1.7	0.5	0.2	0.0
Black Rate	35.9	4.2	2.6	0.5
Hispanic Rate	7.2	0.9	0.2	0.1
Native American Rate	3.8	11.5	0.0	0.0
White Rate	22.3	5.7	3.6	0.4

Figure 5.9 Number of Fatal Drug/Poison Overdoses by Drug Category and Ethanol Level, 2021

Note: Ethanol poisoning deaths listed as 'no ethanol' detected or '0.01-0.07% BAC' were due to toxicology timing issues regarding metabolization of ethanol

Table 5.5 Number of Fatal Drug/Poison Overdoses by Cause of Death and Whether Alcohol Caused Death, 2021

Cause of Death	Caused Death	Contributed to Death	Did Not Cause Death	Total
Illegal (street) drug poisoning	171	92	1670	1933
Mixed drug category	101	12	287	400
Prescription drug poisoning	25	10	207	242
Drug type not specified	0	1	28	29
Over the counter drug poisoning	2	0	22	24
Ethanol poisoning	20	0	0	20
Inhalant poisoning	1	0	11	12
Other poisons (heavy metals, etc.)	0	0	8	8
Ethylene glycol poisoning	0	0	1	1
Total	320	115	2234	2669

Figure 5.10 Number of Fatal Drug/Poison Overdoses by Drug/Poison/Metabolites Detected, 2021**Table 5.6 Number and Percentage of Fatal Drug/Poison Overdoses by Drug/Poison/Metabolite Detected, 2021**

Class	Drug/Poison/Active Metabolite	Number Detected	Percentage of Cases
Alcohol			6.9%
	Acetone	11	0.1%
	Ethanol	677	6.7%
	Isopropanol	6	0.1%
	Methanol	3	0.0%
Analgesic			0.2%
	Acetaminophen	23	0.2%
Anti-Anxiety			4.3%
	Alprazolam	178	1.8%
	Buspirone	3	0.0%
	Clonazepam	1	0.0%
	Delorazepam	1	0.0%
	Diazepam	182	1.8%
	Diclozepam	1	0.0%

Etizolam	24	0.2%
Flualprazolam	3	0.0%
Flubromazepam	3	0.0%
Flubromazolam	1	0.0%
Flurazepam	2	0.0%
Lorazepam	30	0.3%
Meprobamate	4	0.0%
Anti-Convulsant		0.7%
Carbamazepine	10	0.1%
Lacosamide	1	0.0%
Lamotrigine	16	0.2%
Levetiracetam	5	0.0%
Licarbazepine	1	0.0%
Oxcarbazepine	1	0.0%
Phenytoin	2	0.0%
Pregabalin	10	0.1%
Topiramate	21	0.2%
Valproic Acid	2	0.0%
Anti-Depressant		3.3%
Amitriptyline	32	0.3%
Bupropion	46	0.5%
Citalopram	66	0.7%
Doxepin	5	0.0%
Duloxetine	4	0.0%
Fluoxetine	41	0.4%
Lithium	1	0.0%
Mirtazapine	22	0.2%
Nortriptyline	39	0.4%
Paroxetine	8	0.1%
Sertraline	45	0.4%
Venlafaxine	29	0.3%
Anti-Histamine		2.0%
Cetirizine	1	0.0%
Chlorpheniramine	9	0.1%
Diphenhydramine	119	1.2%
Doxylamine	18	0.2%
Hydroxyzine	34	0.3%
Promethazine	18	0.2%
Anti-Psychotic		0.5%
Aripiprazole	7	0.1%
Chlorpromazine	1	0.0%
Clozapine	1	0.0%
Olanzapine	15	0.1%

Quetiapine	23	0.2%
Risperidone	4	0.0%
Cannabinoids		3.3%
Tetrahydrocannabinol Carboxylic Acid (THC)- various compounds	332	3.3%
Medical		4.1%
Amlodipine	36	0.4%
Benzotropine	1	0.0%
Bupivacaine	1	0.0%
Butalbital	7	0.1%
Dextromethorphan	37	0.4%
Dicyclomine	2	0.0%
Diltiazem	3	0.0%
Ephedrine/Pseudoephedrine	21	0.2%
Etomidate	2	0.0%
Gabapentin	96	0.9%
Levamisole/Tetramisole	4	0.0%
Loperamide	2	0.0%
Metformin	1	0.0%
Methemoglobin	5	0.0%
Metoclopramide	2	0.0%
Metoprolol	13	0.1%
Naloxone	153	1.5%
Naltrexone	1	0.0%
Phentermine	5	0.0%
Phenylpropanolamine	5	0.0%
Quinine	9	0.1%
Sildenafil	6	0.1%
Tadalafil	1	0.0%
Trihexyphenidyl	1	0.0%
Verapamil	3	0.0%
Warfarin	1	0.0%
Muscle Relaxant		0.5%
Carisoprodol	1	0.0%
Cyclobenzaprine	43	0.4%
Metaxalone	1	0.0%
Methocarbamol	2	0.0%
Narcotic		33.3%
6-Acetylmorphine	260	2.6%
6-Beta-Naltrexo	1	0.0%
Acetylfentanyl	63	0.6%
Buprenorphine	76	0.7%
Carfentanil	2	0.0%

Clonidine	1	0.0%
Codeine	79	0.8%
Etonitazepyne	1	0.0%
Fentanyl	1603	15.8%
Hydrocodone	44	0.4%
Hydromorphone	44	0.4%
Methadone	99	1.0%
Morphine	408	4.0%
Norbuprenorphine	74	0.7%
Norfentanyl	273	2.7%
Oxycodone	129	1.3%
Oxymorphone	80	0.8%
Para/Meta-Fluorofentanyl	139	1.4%
Tapentadol	1	0.0%
Valeryl Fentanyl (Pentanoyl Fentanyl)	1	0.0%
Other		19.8%
1,1-Difluoroethane	6	0.1%
Benzoylcegonine	791	7.8%
Carboxyhemoglobin	13	0.1%
Chloroethane	1	0.0%
Cocaethylene	224	2.2%
Cotinine	241	2.4%
Despropionylfentanyl	645	6.4%
Ketamine	6	0.1%
Lidocaine	25	0.2%
Mitragynine	28	0.3%
Monoethylglycinexylidide (Megx)	1	0.0%
Norketamine	2	0.0%
Phencyclidine	20	0.2%
Ritalinic Acid	1	0.0%
Salicylate	2	0.0%
Sulfhemoglobin	1	0.0%
Tenocyclidine (Tcp)	3	0.0%
Theobromine	1	0.0%
Sedative/Hypnotic		2.5%
Baclofen	2	0.0%
Chlordiazepoxide	13	0.1%
Clonazepam	73	0.7%
Midazolam	14	0.1%
Oxazepam	35	0.3%
Pentobarbital	1	0.0%
Phenobarbital	5	0.0%
Temazepam	29	0.3%

Trazodone	45	0.4%
Xylazine	26	0.3%
Zolpidem	12	0.1%
Zopiclone	2	0.0%
Stimulant		18.6%
3,4 Methylenedioxymethamphetamine	10	0.1%
Amphetamine	446	4.4%
Atomoxetine	4	0.0%
Caffeine	338	3.3%
Cocaine	569	5.6%
Eutylone	5	0.0%
Methamphetamine	454	4.5%
Nicotine	60	0.6%
TOTAL DRUG/POISON/ACTIVE METABOLITES DETECTED	10139	100.0%

Figure 5.11 Number of Fatal Drug/Poison Overdoses by Class of Drug/Poison/Metabolite Detected that Caused or Contributed to Death, 2021

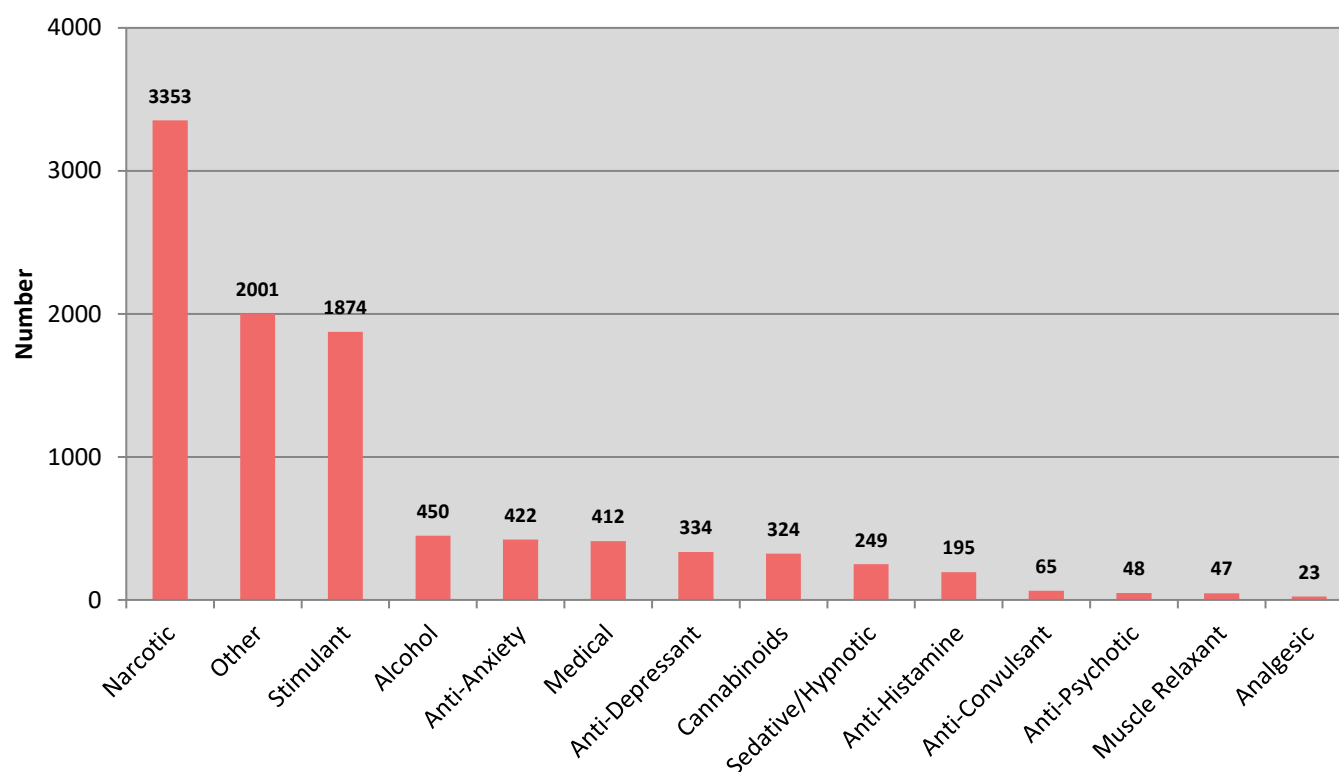


Table 5.7 Number of Fatal Drug/Poison Deaths by Drug/Poison/Metabolites Detected that Caused or Contributed to Death, 2021

Class	Drug/Poison/Active Metabolite	Number Detected	Percentage of Cases
Alcohol			4.6%
	Acetone	10	0.1%
	Ethanol	432	4.4%
	Isopropanol	6	0.1%
	Methanol	2	0.0%
Analgesic			0.2%
	Acetaminophen	23	0.2%
Anti-Anxiety			4.3%
	Alprazolam	177	1.8%
	Buspirone	3	0.0%
	Clonazepam	1	0.0%
	Delorazepam	1	0.0%
	Diazepam	174	1.8%

Diclozepam	1	0.0%
Etizolam	24	0.2%
Flualprazolam	3	0.0%
Flubromazepam	3	0.0%
Flubromazolam	1	0.0%
Flurazepam	0	0.0%
Lorazepam	30	0.3%
Meprobamate	4	0.0%
Anti-Convulsant		0.7%
Carbamazepine	8	0.1%
Lacosamide	1	0.0%
Lamotrigine	16	0.2%
Levetiracetam	5	0.1%
Licarbazepine	1	0.0%
Oxcarbazepine	1	0.0%
Phenytoin	1	0.0%
Pregabalin	10	0.1%
Topiramate	21	0.2%
Valproic Acid	1	0.0%
Anti-Depressant		3.4%
Amitriptyline	31	0.3%
Bupropion	45	0.5%
Citalopram	66	0.7%
Doxepin	5	0.1%
Duloxetine	4	0.0%
Fluoxetine	41	0.4%
Lithium	1	0.0%
Mirtazapine	22	0.2%
Nortriptyline	38	0.4%
Paroxetine	8	0.1%
Sertraline	44	0.4%
Venlafaxine	29	0.3%
Anti-Histamine		2.0%
Cetirizine	1	0.0%
Chlorpheniramine	9	0.1%
Diphenhydramine	117	1.2%
Doxylamine	17	0.2%
Hydroxyzine	33	0.3%
Promethazine	18	0.2%
Anti-Psychotic		0.5%
Aripiprazole	6	0.1%
Chlorpromazine	1	0.0%
Clozapine	1	0.0%

Olanzapine	14	0.1%
Quetiapine	22	0.2%
Risperidone	4	0.0%
Cannabinoids		3.3%
Tetrahydrocannabinol Carboxylic Acid (THC)-various compounds	324	3.3%
Medical		4.2%
Amlodipine	35	0.4%
Benzotropine	1	0.0%
Bupivacaine	1	0.0%
Butalbital	7	0.1%
Dextromethorphan	37	0.4%
Dicyclomine	2	0.0%
Diltiazem	3	0.0%
Ephedrine/Pseudoephedrine	21	0.2%
Etomidate	2	0.0%
Gabapentin	95	1.0%
Levamisole/Tetramisole	4	0.0%
Loperamide	2	0.0%
Metformin	1	0.0%
Methemoglobin	4	0.0%
Metoclopramide	2	0.0%
Metoprolol	12	0.1%
Naloxone	151	1.5%
Naltrexone	1	0.0%
Phentermine	5	0.1%
Phenylpropanolamine	5	0.1%
Quinine	9	0.1%
Sildenafil	6	0.1%
Tadalafil	1	0.0%
Trihexyphenidyl	1	0.0%
Verapamil	3	0.0%
Warfarin	1	0.0%
Muscle Relaxant		0.5%
Carisoprodol	1	0.0%
Cyclobenzaprine	43	0.4%
Metaxalone	1	0.0%
Methocarbamol	2	0.0%
Narcotic		34.2%
6-Acetylmorphine	259	2.6%
6-Beta-Naltrexo	1	0.0%
Acetylfentanyl	63	0.6%
Buprenorphine	76	0.8%

Carfentanil	2	0.0%
Clonidine	1	0.0%
Codeine	79	0.8%
Etonitazepine	1	0.0%
Fentanyl	1590	16.2%
Hydrocodone	43	0.4%
Hydromorphone	43	0.4%
Methadone	99	1.0%
Morphine	405	4.1%
Norbuprenorphine	74	0.8%
Norfentanyl	273	2.8%
Oxycodone	125	1.3%
Oxymorphone	79	0.8%
Para/Meta-Fluorofentanyl	138	1.4%
Tapentadol	1	0.0%
Valeryl Fentanyl (Pentanoyl Fentanyl)	1	0.0%
Other		20.4%
1,1-Difluoroethane	6	0.1%
Benzoyllecgonine	785	8.0%
Carboxyhemoglobin	13	0.1%
Chloroethane	1	0.0%
Cocaethylene	223	2.3%
Cotinine	240	2.4%
Despropionylfentanyl	643	6.6%
Ketamine	6	0.1%
Lidocaine	25	0.3%
Mitragynine	28	0.3%
Monoethylglycinexylidide (Megx)	1	0.0%
Norketamine	2	0.0%
Phencyclidine	20	0.2%
Ritalinic Acid	1	0.0%
Salicylate	2	0.0%
Sulfhemoglobin	1	0.0%
Tenocyclidine (Tcpl)	3	0.0%
Theobromine	1	0.0%
Sedative/Hypnotic		2.5%
Baclofen	2	0.0%
Chlordiazepoxide	13	0.1%
Clonazepam	73	0.7%
Midazolam	10	0.1%
Oxazepam	33	0.3%
Pentobarbital	1	0.0%
Phenobarbital	4	0.0%

Temazepam	28	0.3%
Trazodone	45	0.5%
Xylazine	26	0.3%
Zolpidem	12	0.1%
Zopiclone	2	0.0%
Stimulant		19.1%
3,4 Methylenedioxymethamphetamine	10	0.1%
Amphetamine	442	4.5%
Atomoxetine	4	0.0%
Caffeine	336	3.4%
Cocaine	568	5.8%
Eutylone	5	0.1%
Methamphetamine	450	4.6%
Nicotine	59	0.6%
TOTAL DRUG/POISON/ACTIVE METABOLITES DETECTED	9797	100.0%

Table 5.8 Number and Rate of Fatal Drug/Poison Overdoses by Locality of Residence, 2021

Locality of Residence	Deaths	Rate
Accomack County	11	34.1
Albemarle County	18	16.3
Alexandria City	20	12.6
Alleghany County	6	40.8
Amelia County	3	23.1
Amherst County	12	37.9
Appomattox County	2	12.5
Arlington County	26	10.8
Augusta County	9	11.8
Bath County	0	0.0
Bedford County	26	32.6
Bland County	2	32.1
Botetourt County	11	32.7
Bristol City	5	28.9
Brunswick County	7	43.6
Buchanan County	7	34.0
Buckingham County	4	23.3
Buena Vista City	3	46.9
Campbell County	5	9.0
Caroline County	19	61.6
Carroll County	8	26.6
Charles City County	2	29.3
Charlotte County	7	59.2
Charlottesville City	13	27.7
Chesapeake City	58	23.5
Chesterfield County	154	43.0
Clarke County	6	41.0
Colonial Heights City	7	40.7
Covington City	3	53.2
Craig County	1	19.7
Culpeper County	22	41.1
Cumberland County	2	20.1
Danville City	18	45.1
Dickenson County	6	42.6
Dinwiddie County	12	41.8
Emporia City	5	95.1
Essex County	5	45.7
Fairfax City	2	8.5
Fairfax County	127	11.0
Falls Church City	1	6.8
Fauquier County	19	26.6

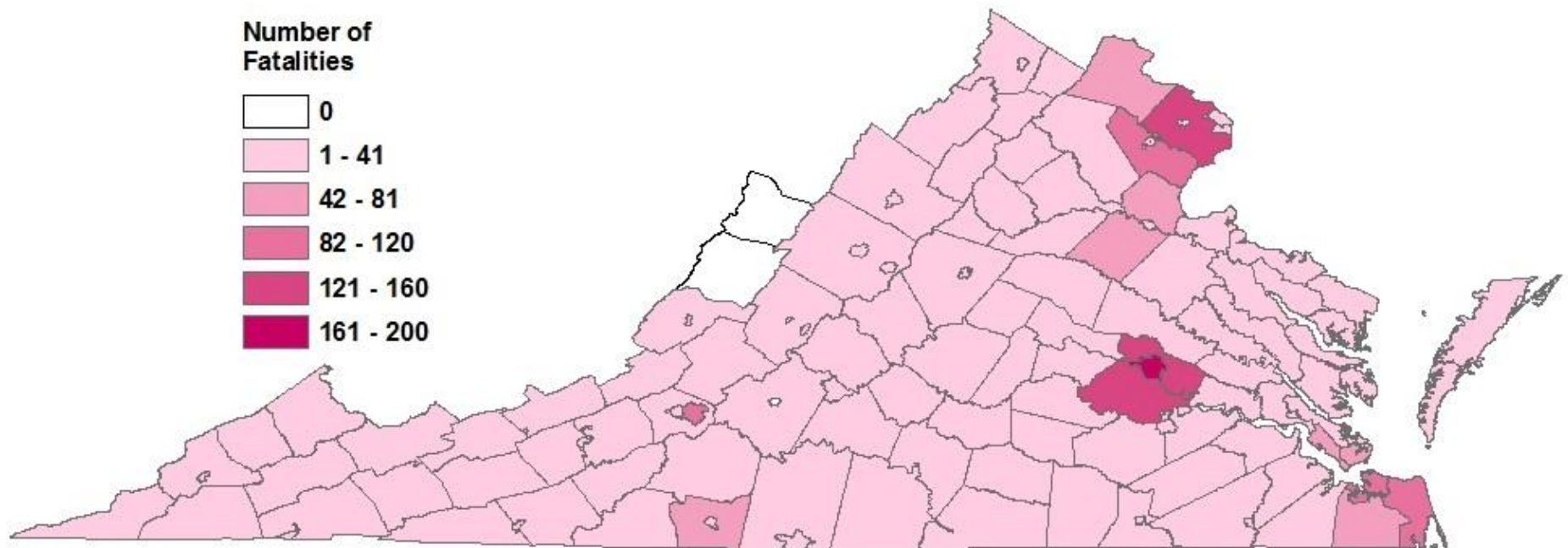
Locality of Residence	Deaths	Rate
Floyd County	4	25.4
Fluvanna County	6	21.9
Franklin City	1	12.8
Franklin County	23	40.9
Frederick County	15	16.5
Fredericksburg City	18	61.0
Galax City	3	47.6
Giles County	4	24.0
Gloucester County	12	32.0
Goochland County	3	12.3
Grayson County	3	19.4
Greene County	2	9.9
Greensville County	3	26.6
Halifax County	15	44.6
Hampton City	45	33.2
Hanover County	29	26.8
Harrisonburg City	7	13.2
Henrico County	126	37.8
Henry County	48	95.4
Highland County	0	0.0
Hopewell City	24	107.3
Isle of Wight County	9	23.9
James City County	12	15.5
King and Queen County	6	86.4
King George County	5	18.3
King William County	8	45.3
Lancaster County	3	28.3
Lee County	2	8.6
Lexington City	0	0.0
Loudoun County	41	9.7
Louisa County	20	52.4
Lunenburg County	3	24.5
Lynchburg City	32	39.2
Madison County	2	15.0
Manassas City	16	39.1
Manassas Park City	9	50.0
Martinsville City	9	72.8
Mathews County	3	34.2
Mecklenburg County	13	42.4
Middlesex County	4	37.8
Montgomery County	17	17.3

Locality of Residence	Deaths	Rate
Nelson County	1	6.8
New Kent County	10	42.3
Newport News City	65	36.3
Norfolk City	111	45.7
Northampton County	4	34.3
Northumberland County	8	66.3
Norton City	2	50.2
Nottoway County	5	33.0
Orange County	14	37.1
Page County	9	37.6
Patrick County	10	57.2
Petersburg City	33	108.4
Pittsylvania County	14	23.4
Poquoson City	5	40.8
Portsmouth City	83	87.3
Powhatan County	10	33.2
Prince Edward County	5	21.7
Prince George County	18	46.5
Prince William County	83	17.5
Pulaski County	20	58.9
Radford City	4	21.9
Rappahannock County	4	55.1
Richmond City	200	86.1
Richmond County	1	11.0
Roanoke City	82	82.8
Roanoke County	32	33.9
Rockbridge County	2	8.8
Rockingham County	7	8.5
Russell County	4	15.0
Salem City	8	31.6
Scott County	4	18.5
Shenandoah County	9	20.5
Smyth County	8	26.6
Southampton County	3	17.0
Spotsylvania County	62	44.8
Stafford County	41	26.2
Staunton City	3	11.9
Suffolk City	35	37.3
Surry County	1	15.7
Sussex County	3	27.5
Tazewell County	25	61.7
Virginia Beach City	115	25.5
Warren County	16	39.5

Locality of Residence	Deaths	Rate
Washington County	15	27.9
Waynesboro City	5	22.0
Westmoreland County	5	27.5
Williamsburg City	1	6.6
Winchester City	10	36.1
Wise County	21	56.4
Wythe County	7	24.5
York County	6	8.7
<i>Subtotal (in-state)</i>	2528	29.4
Out of State	130	ND
Unknown	11	ND
<i>Subtotal (out-of-state)</i>	141	ND
TOTAL	2669	31.1

Note: No denominator is represented by ND

Map 5.1 Number of Fatal Drug/Poison Overdoses by Locality of Residence, 2021



Map 5.2 Rates of Fatal Drug/Poison Overdoses by Locality of Residence, 2021

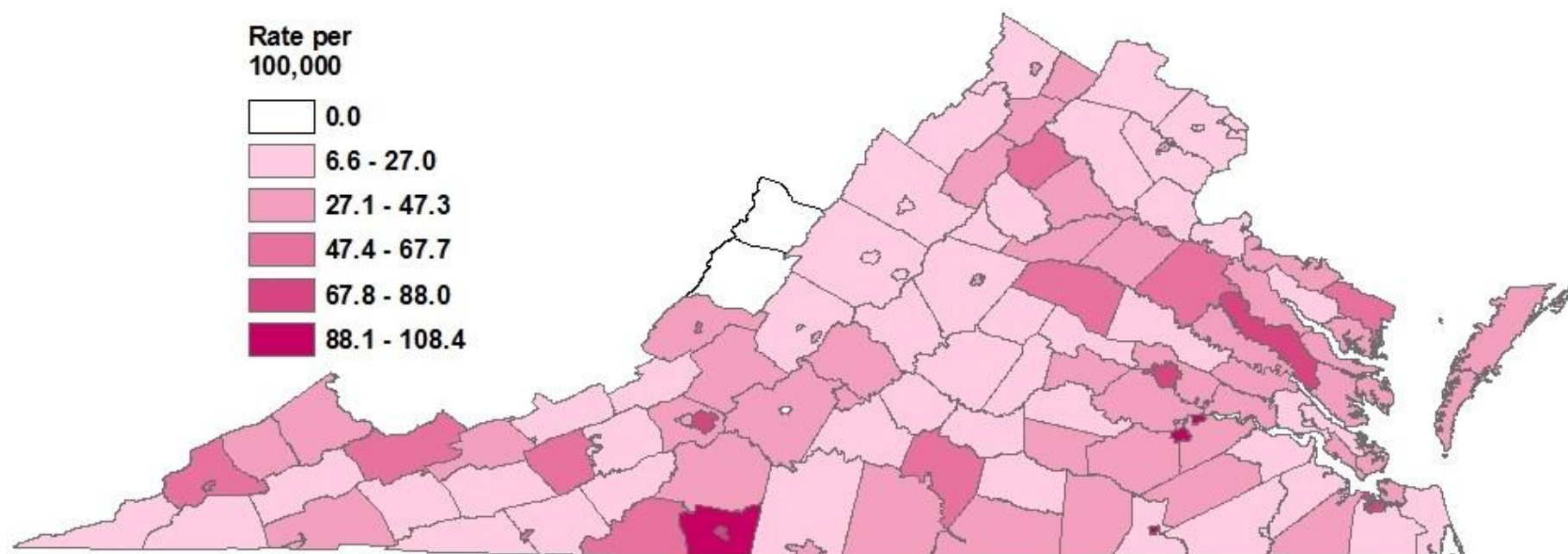


Table 5.9 Number and Rate of Fatal Drug/Poison Overdoses by Locality of Injury, 2021

Locality of Injury	Deaths	Rate
Accomack County	12	37.2
Albemarle County	17	15.4
Alexandria City	20	12.6
Alleghany County	6	40.8
Amelia County	2	15.4
Amherst County	10	31.6
Appomattox County	2	12.5
Arlington County	32	13.3
Augusta County	12	15.7
Bath County	0	0.0
Bedford County	21	26.3
Bland County	3	48.1
Botetourt County	7	20.8
Bristol City	8	46.2
Brunswick County	10	62.4
Buchanan County	7	34.0
Buckingham County	4	23.3
Buena Vista City	2	31.2
Campbell County	9	16.3
Caroline County	20	64.8
Carroll County	8	26.6
Charles City County	1	14.7
Charlotte County	7	59.2
Charlottesville City	19	40.5
Chesapeake City	54	21.9
Chesterfield County	128	35.7
Clarke County	3	20.5
Colonial Heights City	4	23.2
Covington City	3	53.2
Craig County	0	0.0
Culpeper County	22	41.1
Cumberland County	2	20.1
Danville City	19	47.7
Dickenson County	6	42.6
Dinwiddie County	8	27.9
Emporia City	4	76.1
Essex County	4	36.6
Fairfax City	3	12.8
Fairfax County	135	11.7
Falls Church City	1	6.8
Fauquier County	17	23.8
Floyd County	6	38.0
Fluvanna County	4	14.6

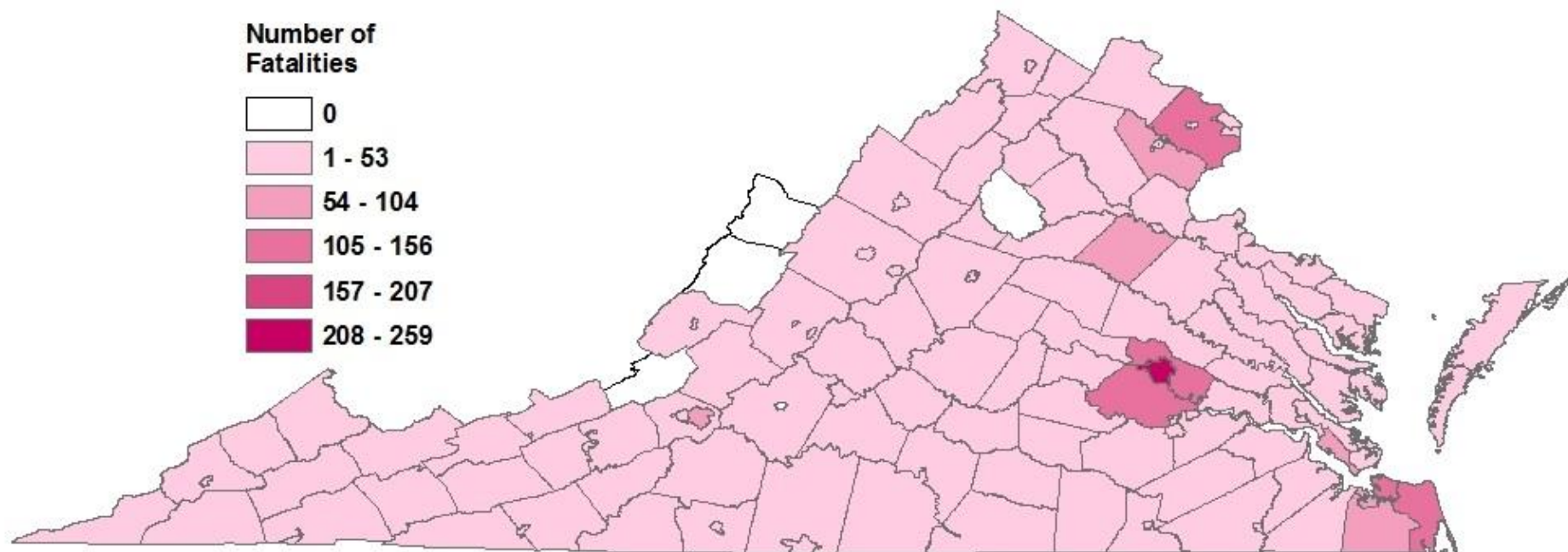
Locality of Injury	Deaths	Rate
Franklin City	1	12.8
Franklin County	20	35.6
Frederick County	21	23.0
Fredericksburg City	22	74.6
Galax City	2	31.8
Giles County	4	24.0
Gloucester County	10	26.7
Goochland County	6	24.6
Grayson County	3	19.4
Greene County	2	9.9
Greensville County	3	26.6
Halifax County	16	47.6
Hampton City	52	38.4
Hanover County	29	26.8
Harrisonburg City	10	18.8
Henrico County	141	42.2
Henry County	44	87.5
Highland County	0	0.0
Hopewell City	24	107.3
Isle of Wight County	6	15.9
James City County	6	7.7
King and Queen County	6	86.4
King George County	8	29.2
King William County	4	22.7
Lancaster County	2	18.8
Lee County	3	12.9
Lexington City	0	0.0
Loudoun County	35	8.3
Louisa County	17	44.6
Lunenburg County	5	40.8
Lynchburg City	33	40.5
Madison County	0	0.0
Manassas City	18	44.0
Manassas Park City	8	44.4
Martinsville City	12	97.1
Mathews County	2	22.8
Mecklenburg County	11	35.9
Middlesex County	6	56.8
Montgomery County	15	15.2
Nelson County	1	6.8
New Kent County	9	38.1
Newport News City	74	41.3
Norfolk City	128	52.7

Locality of Injury	Deaths	Rate
Northampton County	3	25.7
Northumberland County	4	33.1
Norton City	3	75.3
Nottoway County	3	19.8
Orange County	15	39.8
Page County	9	37.6
Patrick County	9	51.4
Petersburg City	42	137.9
Pittsylvania County	14	23.4
Poquoson City	4	32.6
Portsmouth City	95	99.9
Powhatan County	7	23.2
Prince Edward County	4	17.4
Prince George County	16	41.4
Prince William County	95	20.0
Pulaski County	18	53.0
Radford City	4	21.9
Rappahannock County	5	68.9
Richmond City	259	111.5
Richmond County	2	22.0
Roanoke City	97	97.9
Roanoke County	34	36.0
Rockbridge County	2	8.8
Rockingham County	5	6.1
Russell County	4	15.0
Salem City	7	27.6
Scott County	5	23.1
Shenandoah County	10	22.8
Smyth County	9	29.9
Southampton County	4	22.7
Spotsylvania County	53	38.3
Stafford County	36	23.0
Staunton City	5	19.8
Suffolk City	29	30.9
Surry County	1	15.7
Sussex County	3	27.5
Tazewell County	24	59.2
Virginia Beach City	119	26.4
Warren County	18	44.5
Washington County	15	27.9
Waynesboro City	4	17.6
Westmoreland County	2	11.0
Williamsburg City	2	13.1

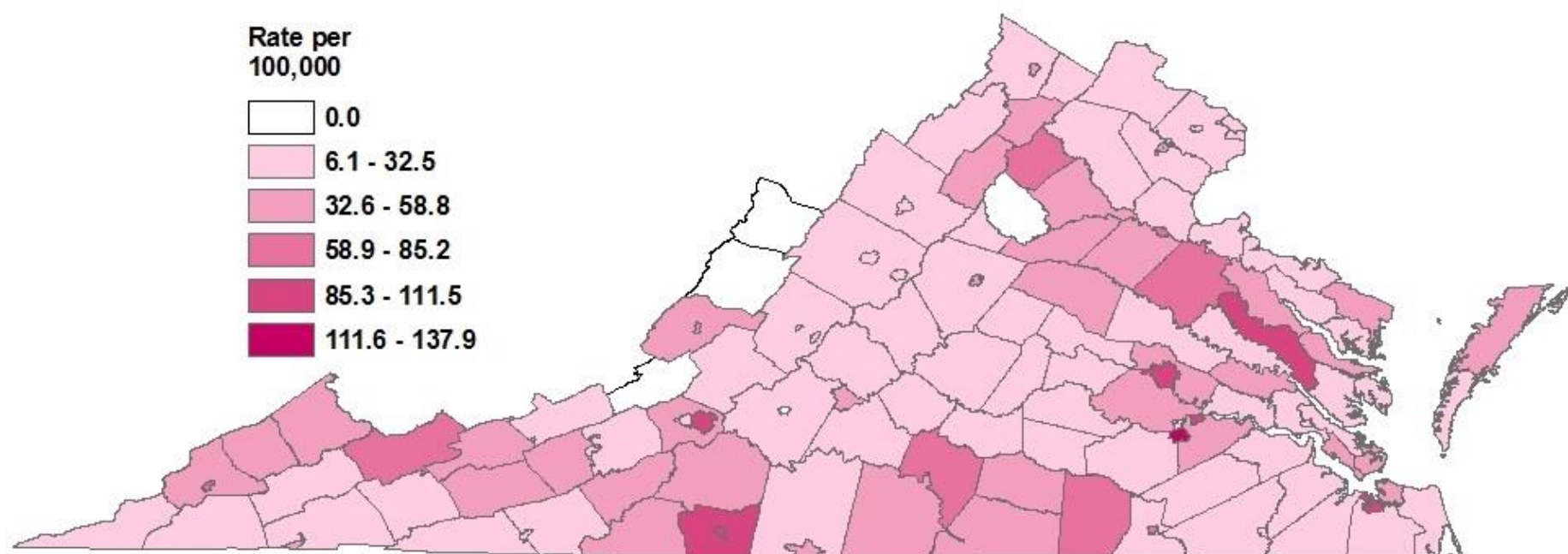
Locality of Injury	Deaths	Rate
Winchester City	10	36.1
Wise County	21	56.4
Wythe County	11	38.4
York County	6	8.7
<i>Subtotal (in-state)</i>	2628	30.6
Out of State	19	ND
Unknown	22	ND
<i>Subtotal (out-of-state)</i>	41	ND
TOTAL	2669	31.1

Note: No denominator is represented by ND

Map 5.3 Number of Fatal Drug/Poison Overdoses by Locality of Injury, 2021



Map 5.4 Rates of Fatal Drug/Poison Overdoses by Locality of Injury, 2021



PRESCRIPTION OPIOIDS EXCLUDING FENTANYL (N=454)

Prior to 2015, the largest number of fatal drug overdoses were attributed to prescription opioids. Although heroin and/or fentanyl deaths surpassed prescription opioid deaths in 2015, one or more prescription opioids (excluding fentanyl) were involved in 17.0% of all fatal drug overdoses in 2021.

- Oxycodone continued to be the most common prescription opioid causing or contributing to death
- Whites made up 79.3% of the fatal prescription opioid (excluding fentanyl) overdoses in 2021
- Males aged 45-54 years had the highest rates of fatal prescription opioid (excluding fentanyl) overdose in 2021 (12.2 deaths per 100,00 persons)

Figure 5.12 Number of All Fatal Drug Overdoses Compared to All Fatal Prescription Opioid (Excluding Fentanyl) Overdoses by Year of Death, 2007-2021

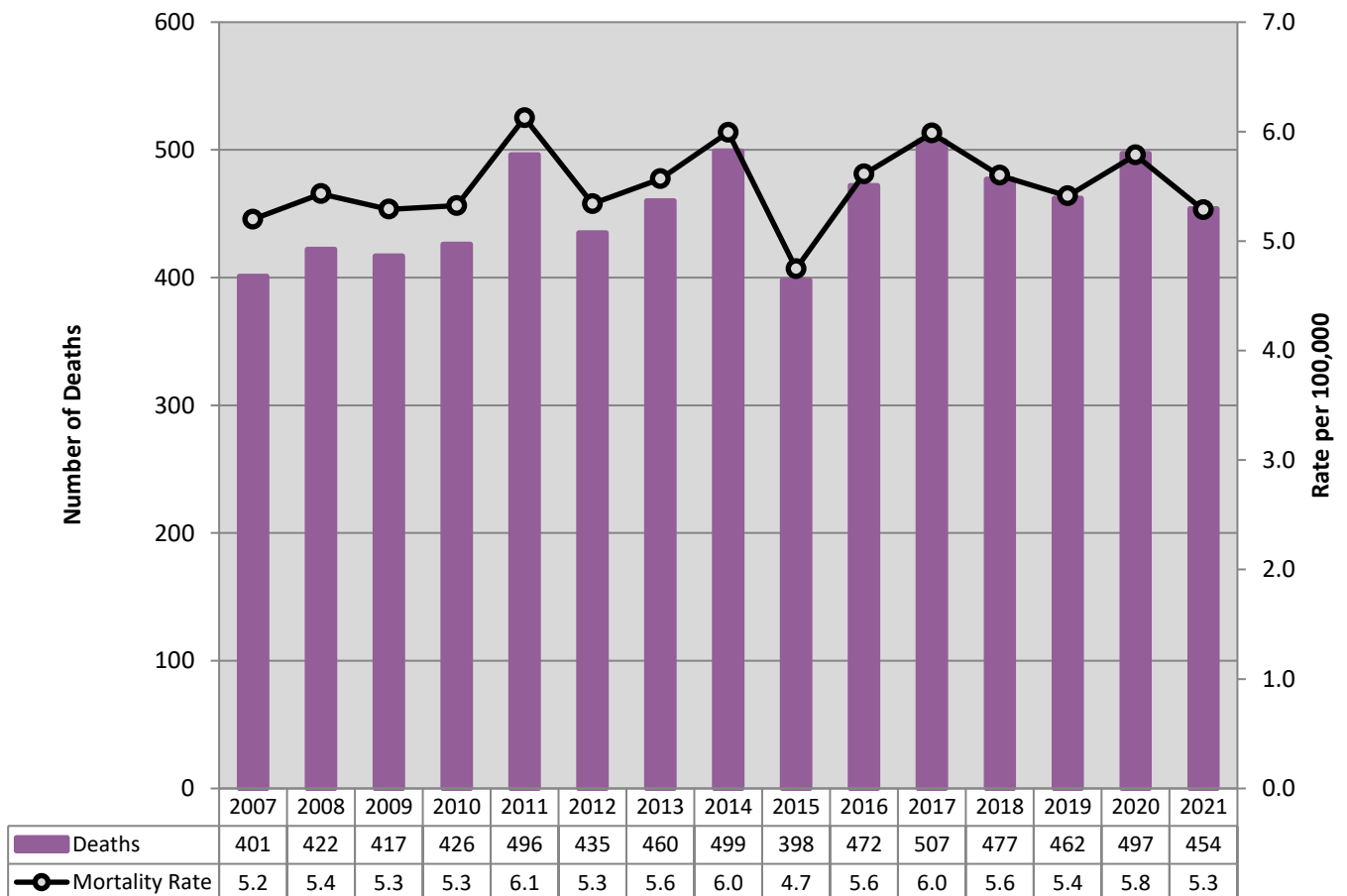


Figure 5.13 Number of Prescription Opioids (Excluding Fentanyl) Causing or Contributing to Death in Fatal Drug/Poison Overdoses, 2021

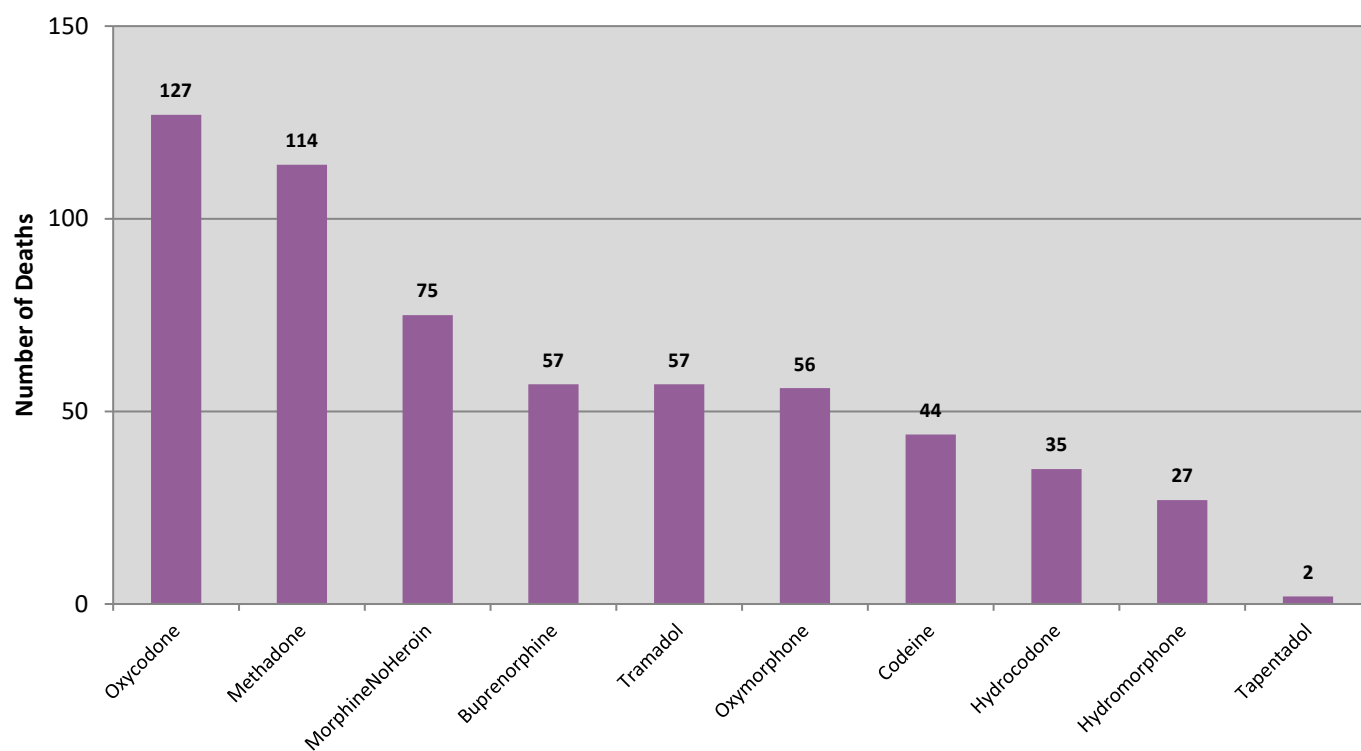


Figure 5.14 Percentage of Fatal Prescription Opioid (Excluding Fentanyl) Overdoses by Manner of Death, 2021

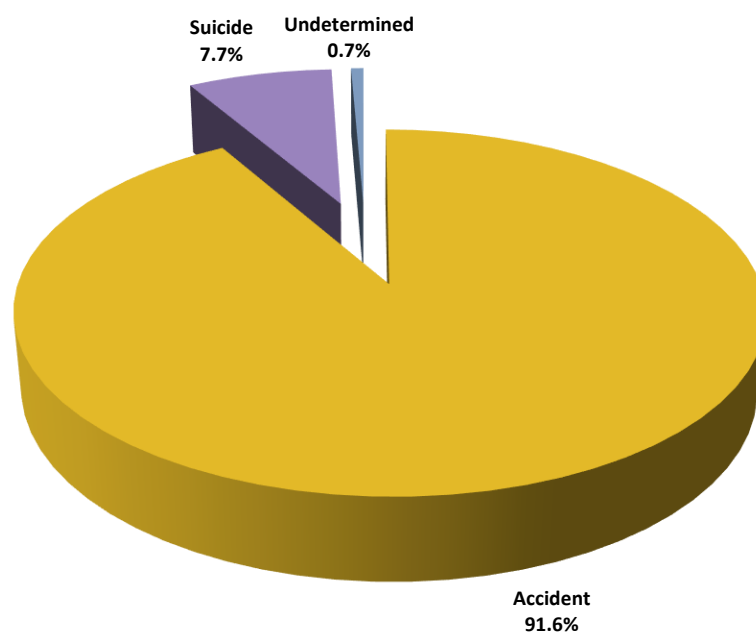


Table 5.10 Number of Prescription Opioids (Excluding Fentanyl) Detected in Fatal Drug Overdoses by OCME District, 2021

Prescription Opioid	Central	Northern	Tidewater	Western	TOTAL
Oxycodone	28	32	25	42	127
Methadone	37	25	27	25	114
Morphine	21	26	21	7	75
Buprenorphine	13	21	9	14	57
Tramadol	9	28	7	13	57
Oxymorphone	13	16	12	15	56
Codeine	11	8	20	5	44
Hydrocodone	5	4	9	17	35
Hydromorphone	3	9	10	5	27
Tapentadol	0	2	0	0	2
TOTAL	113	122	108	111	454

Note: Summing the subtotals will surpass the total since the groups are not mutually exclusive because often, more than one drug causes death

Figure 5.15 Number and Rate of Fatal Prescription Opioid (Excluding Fentanyl) Overdoses by Age Group and Gender, 2021

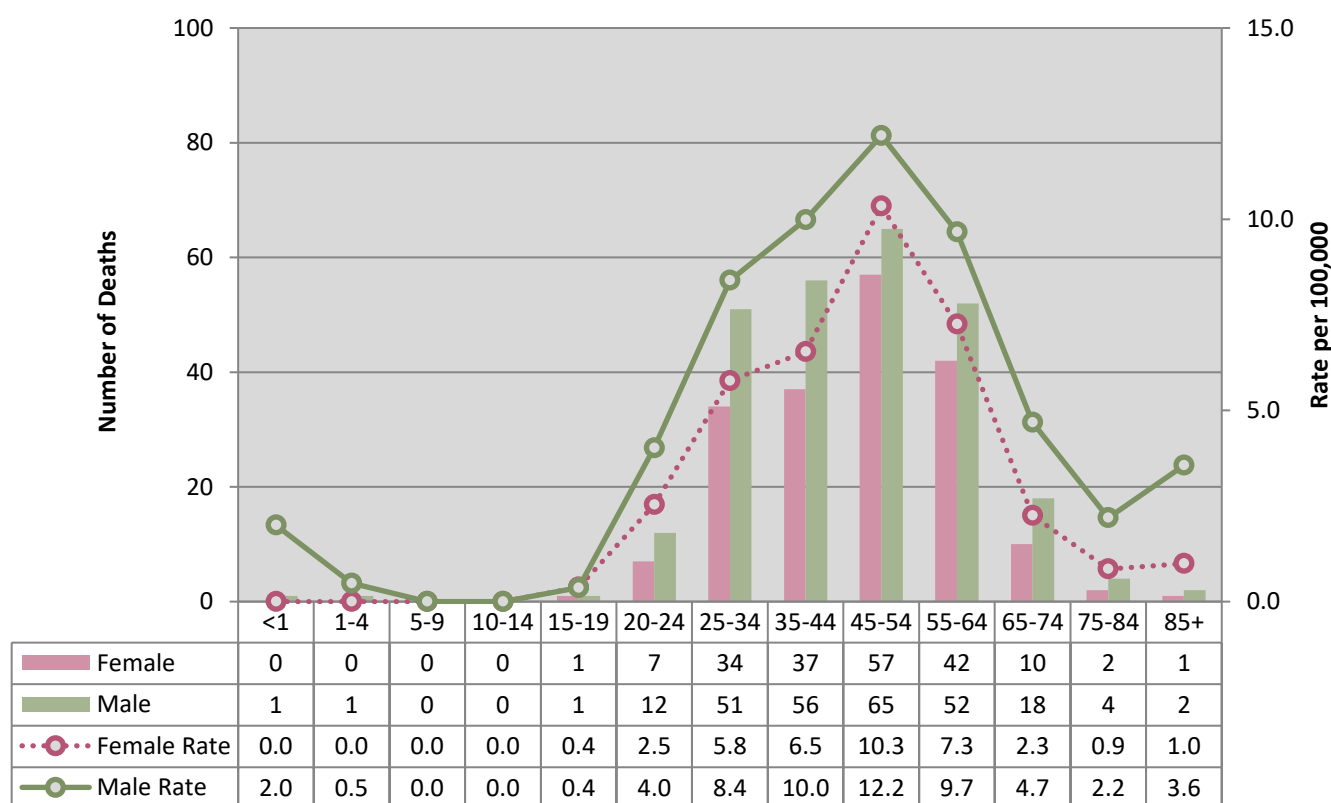


Figure 5.16 Percentage of Fatal Prescription Opioid (Excluding Fentanyl) Overdoses by Race/Ethnicity, 2021

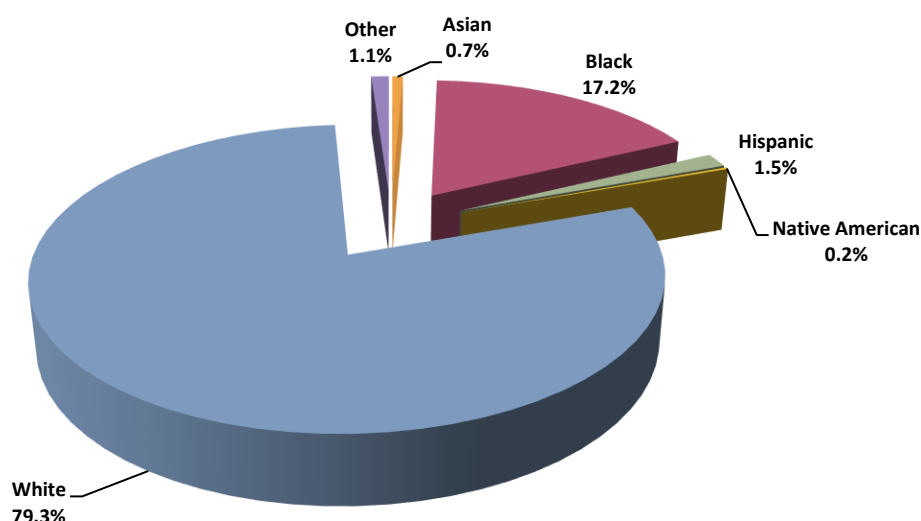
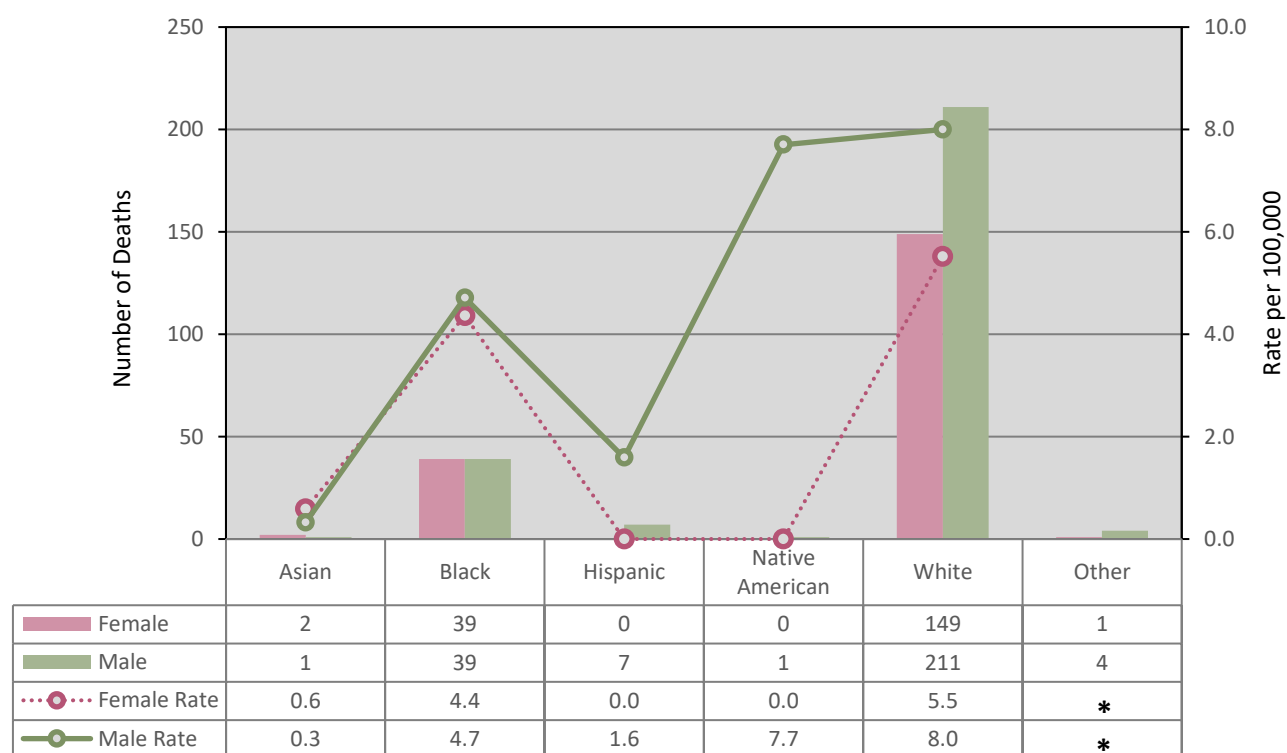


Figure 5.17 Number and Rate of Fatal Prescription Opioid (Excluding Fentanyl) Overdoses by Race/Ethnicity and Gender, 2021



*No rate can be calculated

Note: Rates calculated from small case counts (n<5) are considered unreliable and should be interpreted with caution (Asians and Native American males)

Table 5.11 Number and Rate of Fatal Prescription Opioid (Excluding Fentanyl) Overdoses by Locality of Residence, 2021

Locality of Residence	Deaths	Rate
Accomack County	3	9.3
Albemarle County	1	0.9
Alexandria City	2	1.3
Alleghany County	0	0.0
Amelia County	0	0.0
Amherst County	1	3.2
Appomattox County	1	6.2
Arlington County	6	2.5
Augusta County	3	3.9
Bath County	0	0.0
Bedford County	3	3.8
Bland County	0	0.0
Botetourt County	1	3.0
Bristol City	1	5.8
Brunswick County	0	0.0
Buchanan County	1	4.9
Buckingham County	0	0.0
Buena Vista City	1	15.6
Campbell County	1	1.8
Caroline County	4	13.0
Carroll County	2	6.7
Charles City County	0	0.0
Charlotte County	1	8.5
Charlottesville City	0	0.0
Chesapeake City	8	3.2
Chesterfield County	17	4.7
Clarke County	1	6.8
Colonial Heights City	2	11.6
Covington City	1	17.7
Craig County	0	0.0
Culpeper County	7	13.1
Cumberland County	1	10.1
Danville City	4	10.0
Dickenson County	2	14.2
Dinwiddie County	0	0.0
Emporia City	2	38.0
Essex County	0	0.0
Fairfax City	1	4.3
Fairfax County	19	1.7

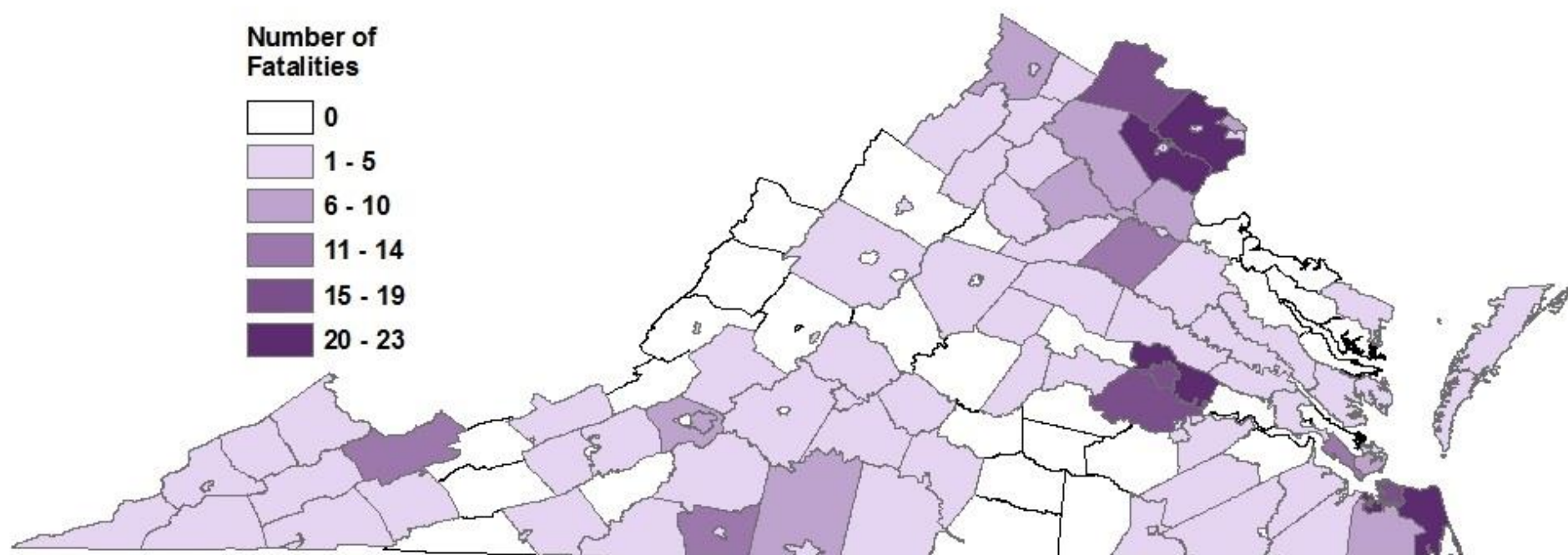
Locality of Residence	Deaths	Rate
Falls Church City	1	6.8
Fauquier County	6	8.4
Floyd County	0	0.0
Fluvanna County	2	7.3
Franklin City	0	0.0
Franklin County	4	7.1
Frederick County	8	8.8
Fredericksburg City	3	10.2
Galax City	1	15.9
Giles County	1	6.0
Gloucester County	4	10.7
Goochland County	0	0.0
Grayson County	0	0.0
Greene County	0	0.0
Greensville County	1	8.9
Halifax County	1	3.0
Hampton City	8	5.9
Hanover County	2	1.8
Harrisonburg City	1	1.9
Henrico County	23	6.9
Henry County	12	23.9
Highland County	0	0.0
Hopewell City	1	4.5
Isle of Wight County	1	2.7
James City County	2	2.6
King and Queen County	2	28.8
King George County	0	0.0
King William County	3	17.0
Lancaster County	0	0.0
Lee County	1	4.3
Lexington City	0	0.0
Loudoun County	16	3.8
Louisa County	3	7.9
Lunenburg County	0	0.0
Lynchburg City	1	1.2
Madison County	1	7.5
Manassas City	1	2.4
Manassas Park City	1	5.6
Martinsville City	4	32.4

Locality of Residence	Deaths	Rate
Mathews County	1	11.4
Mecklenburg County	0	0.0
Middlesex County	0	0.0
Montgomery County	4	4.1
Nelson County	0	0.0
New Kent County	3	12.7
Newport News City	12	6.7
Norfolk City	16	6.6
Northampton County	2	17.1
Northumberland County	3	24.9
Norton City	1	25.1
Nottoway County	0	0.0
Orange County	5	13.3
Page County	2	8.4
Patrick County	3	17.1
Petersburg City	2	6.6
Pittsylvania County	6	10.0
Poquoson City	1	8.2
Portsmouth City	20	21.0
Powhatan County	2	6.6
Prince Edward County	0	0.0
Prince George County	3	7.8
Prince William County	19	4.0
Pulaski County	5	14.7
Radford City	0	0.0
Rappahannock County	1	13.8
Richmond City	16	6.9
Richmond County	0	0.0
Roanoke City	8	8.1
Roanoke County	7	7.4

Locality of Residence	Deaths	Rate
Rockbridge County	0	0.0
Rockingham County	0	0.0
Russell County	2	7.5
Salem City	0	0.0
Scott County	1	4.6
Shenandoah County	5	11.4
Smyth County	2	6.6
Southampton County	3	17.0
Spotsylvania County	12	8.7
Stafford County	9	5.7
Staunton City	0	0.0
Suffolk City	2	2.1
Surry County	0	0.0
Sussex County	1	9.2
Tazewell County	11	27.1
Virginia Beach City	19	4.2
Warren County	5	12.4
Washington County	4	7.4
Waynesboro City	0	0.0
Westmoreland County	0	0.0
Williamsburg City	0	0.0
Winchester City	1	3.6
Wise County	4	10.8
Wythe County	0	0.0
York County	0	0.0
<i>Subtotal (in-state)</i>	435	5.1
Out of State	15	ND
Unknown	4	ND
<i>Subtotal (out-of-state)</i>	19	ND
TOTAL	454	5.3

Note: No denominator is represented by ND

Map 5.5 Number of Fatal Prescription Opioid (Excluding Fentanyl) Overdoses by Locality of Residence, 2021



Map 5.6 Rates of Fatal Prescription Opioid (Excluding Fentanyl) Overdoses by Locality of Residence, 2021

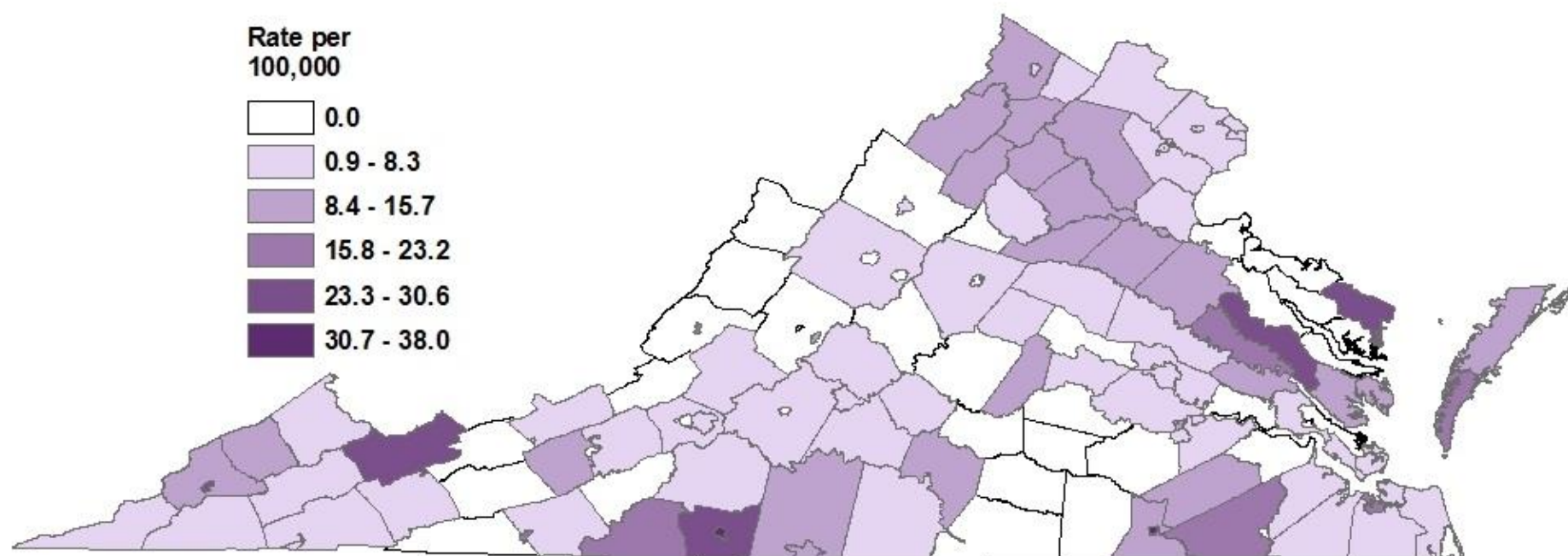


Table 5.12 Number and Rate of Fatal Prescription Opioid (Excluding Fentanyl) Overdoses by Locality of Injury, 2021

Locality of Injury	Deaths	Rate
Accomack County	3	9.3
Albemarle County	0	0.0
Alexandria City	1	0.6
Alleghany County	0	0.0
Amelia County	0	0.0
Amherst County	2	6.3
Appomattox County	1	6.2
Arlington County	8	3.3
Augusta County	3	3.9
Bath County	0	0.0
Bedford County	3	3.8
Bland County	0	0.0
Botetourt County	1	3.0
Bristol City	1	5.8
Brunswick County	0	0.0
Buchanan County	1	4.9
Buckingham County	0	0.0
Buena Vista City	1	15.6
Campbell County	1	1.8
Caroline County	5	16.2
Carroll County	3	10.0
Charles City County	0	0.0
Charlotte County	1	8.5
Charlottesville City	1	2.1
Chesapeake City	9	3.6
Chesterfield County	19	5.3
Clarke County	0	0.0
Colonial Heights City	3	17.4
Covington City	1	17.7
Craig County	0	0.0
Culpeper County	7	13.1
Cumberland County	1	10.1
Danville City	6	15.0
Dickenson County	2	14.2
Dinwiddie County	0	0.0
Emporia City	0	0.0
Essex County	0	0.0
Fairfax City	1	4.3
Fairfax County	22	1.9
Falls Church City	0	0.0
Fauquier County	4	5.6
Floyd County	0	0.0

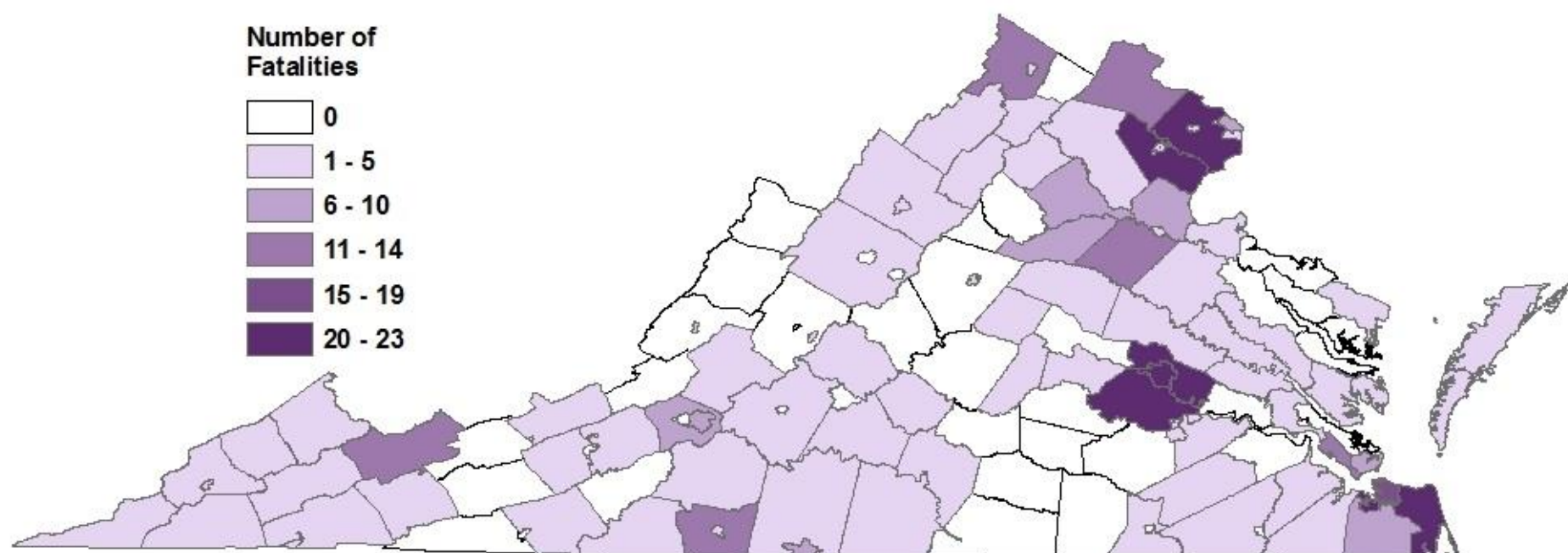
Locality of Injury	Deaths	Rate
Fluvanna County	2	7.3
Franklin City	0	0.0
Franklin County	3	5.3
Frederick County	11	12.1
Fredericksburg City	3	10.2
Galax City	0	0.0
Giles County	1	6.0
Gloucester County	4	10.7
Goochland County	0	0.0
Grayson County	0	0.0
Greene County	0	0.0
Greensville County	2	17.7
Halifax County	2	5.9
Hampton City	8	5.9
Hanover County	1	0.9
Harrisonburg City	1	1.9
Henrico County	20	6.0
Henry County	11	21.9
Highland County	0	0.0
Hopewell City	1	4.5
Isle of Wight County	1	2.7
James City County	2	2.6
King and Queen County	1	14.4
King George County	2	7.3
King William County	2	11.3
Lancaster County	0	0.0
Lee County	2	8.6
Lexington City	0	0.0
Loudoun County	14	3.3
Louisa County	3	7.9
Lunenburg County	0	0.0
Lynchburg City	0	0.0
Madison County	0	0.0
Manassas City	1	2.4
Manassas Park City	2	11.1
Martinsville City	5	40.5
Mathews County	1	11.4
Mecklenburg County	0	0.0
Middlesex County	0	0.0
Montgomery County	4	4.1
Nelson County	0	0.0
New Kent County	3	12.7

Locality of Injury	Deaths	Rate
Newport News City	14	7.8
Norfolk City	18	7.4
Northampton County	2	17.1
Northumberland County	2	16.6
Norton City	1	25.1
Nottoway County	0	0.0
Orange County	7	18.6
Page County	2	8.4
Patrick County	3	17.1
Petersburg City	2	6.6
Pittsylvania County	4	6.7
Poquoson City	0	0.0
Portsmouth City	23	24.2
Powhatan County	3	10.0
Prince Edward County	0	0.0
Prince George County	1	2.6
Prince William County	19	4.0
Pulaski County	5	14.7
Radford City	0	0.0
Rappahannock County	1	13.8
Richmond City	22	9.5
Richmond County	0	0.0
Roanoke City	8	8.1
Roanoke County	8	8.5
Rockbridge County	0	0.0
Rockingham County	1	1.2
Russell County	2	7.5
Salem City	0	0.0
Scott County	1	4.6
Shenandoah County	5	11.4
Smyth County	2	6.6
Southampton County	3	17.0
Spotsylvania County	11	7.9
Stafford County	8	5.1
Staunton City	0	0.0
Suffolk City	1	1.1
Surry County	0	0.0
Sussex County	1	9.2
Tazewell County	11	27.1
Virginia Beach City	19	4.2
Warren County	4	9.9
Washington County	4	7.4
Waynesboro City	0	0.0

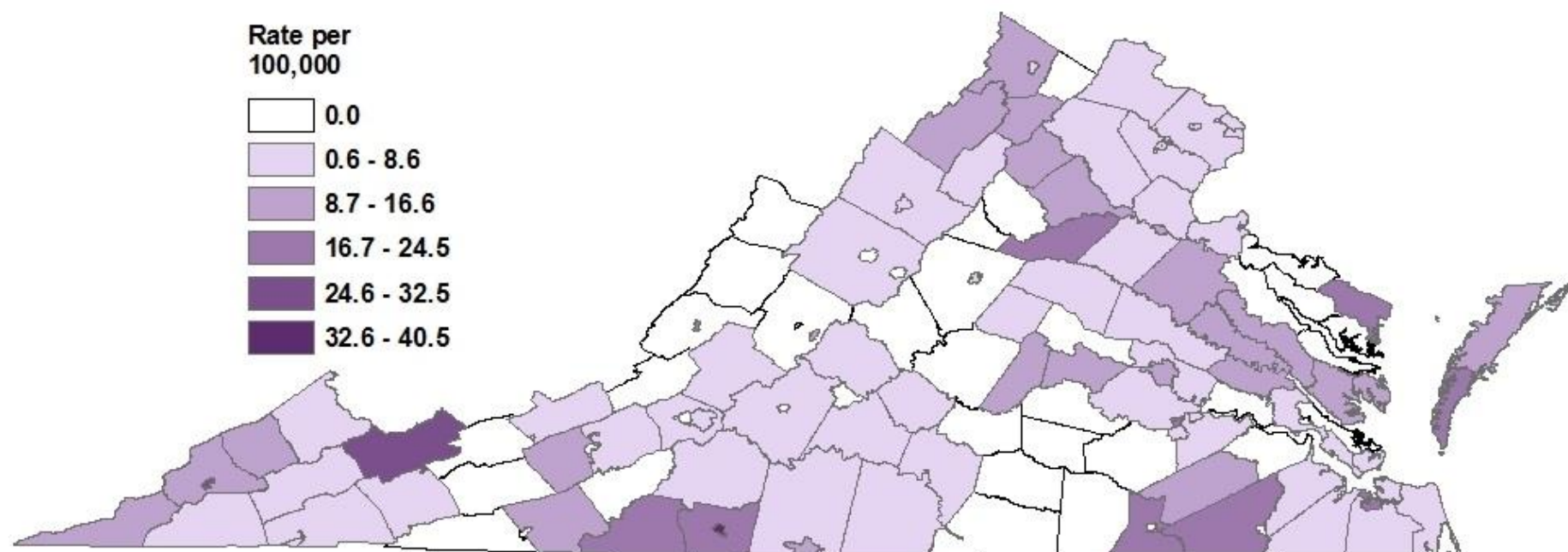
Locality of Injury	Deaths	Rate
Westmoreland County	0	0.0
Williamsburg City	0	0.0
Winchester City	2	7.2
Wise County	4	10.8
Wythe County	0	0.0
York County	0	0.0
<i>Subtotal (in-state)</i>	448	5.2
Out of State	3	ND
Unknown	3	ND
<i>Subtotal (out-of-state)</i>	6	ND
TOTAL	454	5.3

Note: No denominator is represented by ND

Map 5.7 Number of Fatal Prescription Opioid (Excluding Fentanyl) Overdoses by Locality of Injury, 2021



Map 5.8 Rates of Fatal Prescription Opioid (Excluding Fentanyl) Overdoses by Locality of Injury, 2021



FENTANYL AND/OR HEROIN DEATHS (N=2,058)

The number of fatal fentanyl and/or heroin overdoses has significantly increased each year since 2010. Illicitly-produced fentanyl began appearing in Virginia in 2013/2014 and is often mixed in with heroin or sold disguised as heroin, often unbeknownst to the user. In 2016, Virginia began seeing a spike in fentanyl analogs; drugs similar to fentanyl, but slightly different in their chemical structure which alters potency. Illicitly produced fentanyl, but not the various fentanyl analogs, is indistinguishable from pharmaceutical fentanyl in toxicology.

- Fatal fentanyl and/or heroin overdoses in 2021 increased by 20.9% when compared to 2020
- Over 99% of fatal fentanyl and/or heroin overdoses in 2021 were accidents
- In 2021, males 35-44 years of age had the highest rate of death (70.3 deaths per 100,000 persons)
- Fentanyl and/or heroin was involved in 77.1% of all drug/poison cases in Virginia in 2021

Figure 5.18 Number and Rate of Fatal Fentanyl and/or Heroin Overdoses by Year of Death, 2007-2021

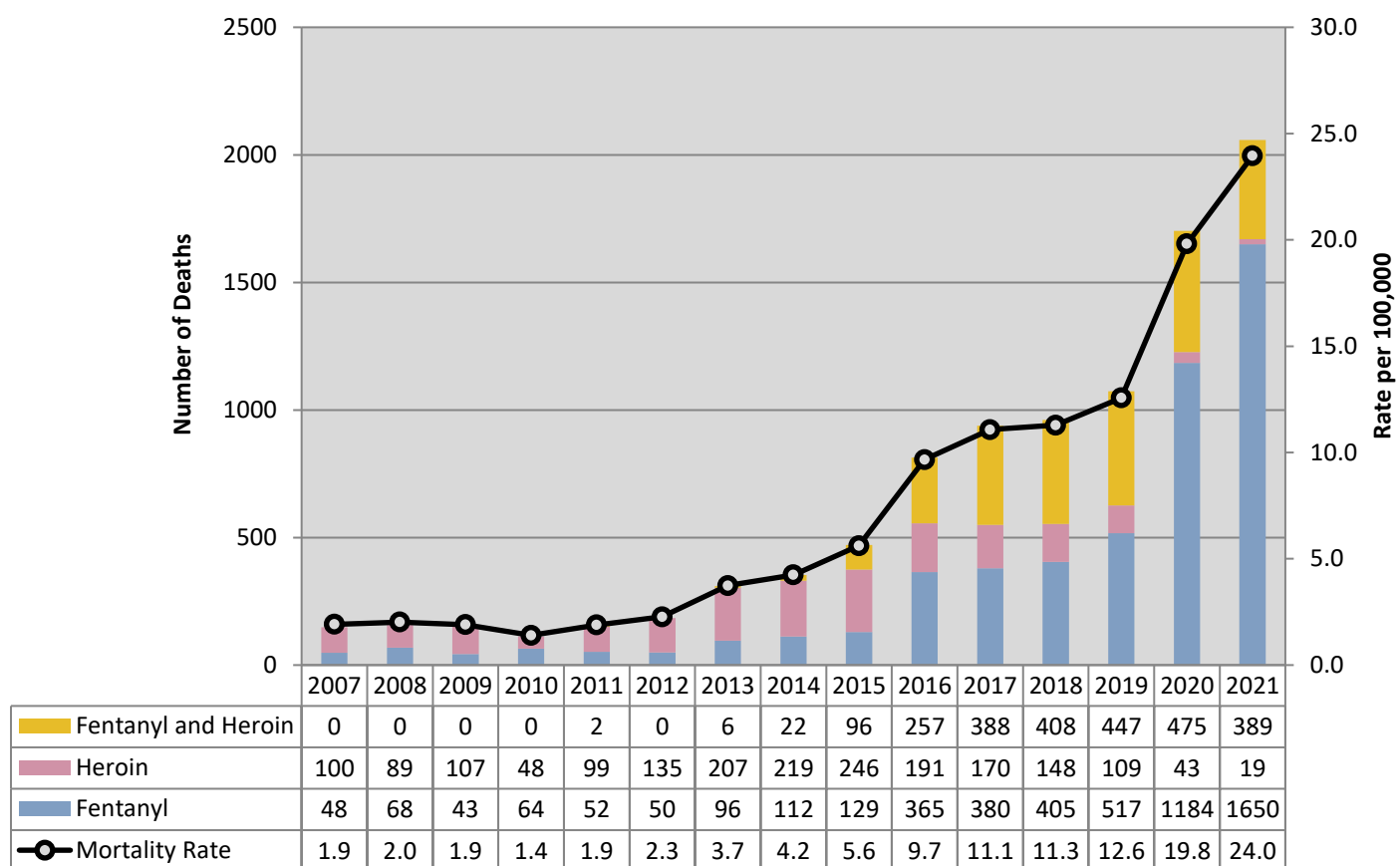
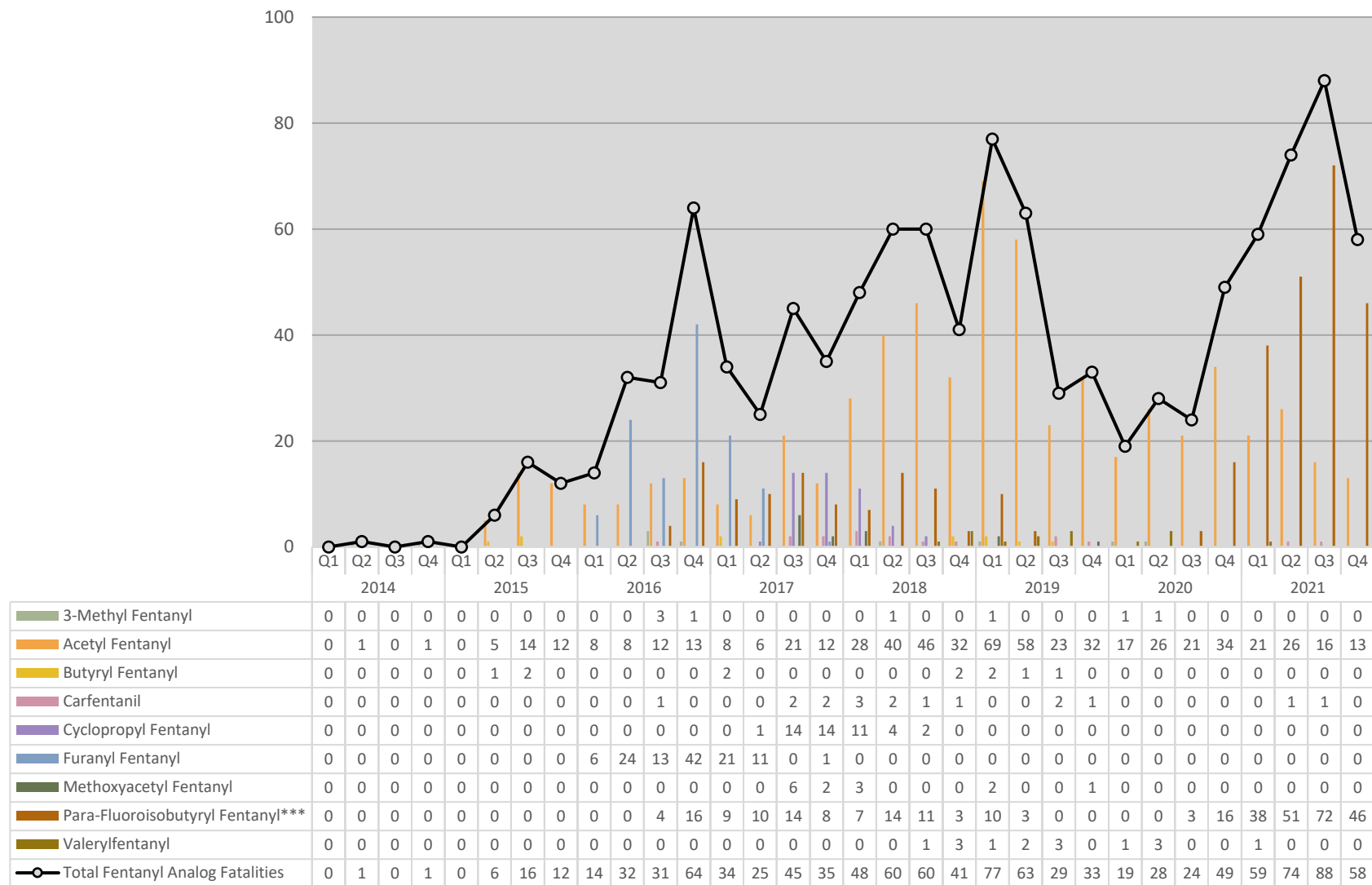


Figure 5.19 Number of Fatal Fentanyl Analog Overdoses Quarter, 2014-2021



** Each fentanyl analog is tallied by each time it caused or contributed to death (analyzed from either toxicology or the cause of death statement) and therefore the total number of analogs will exceed the actual number of fatalities

Table 5.13 Number of Fatal Fentanyl and/or Heroin Overdoses by OCME District, 2021

OCME District	Fentanyl	Heroin	Fentanyl and Heroin	Total
Central	604	5	156	765
Northern	363	1	35	399
Tidewater	360	3	158	521
Western	323	10	40	373
Total	1650	19	389	2058

Figure 5.20 Percentage of Fatal Fentanyl and/or Heroin Overdoses by Manner of Death, 2021

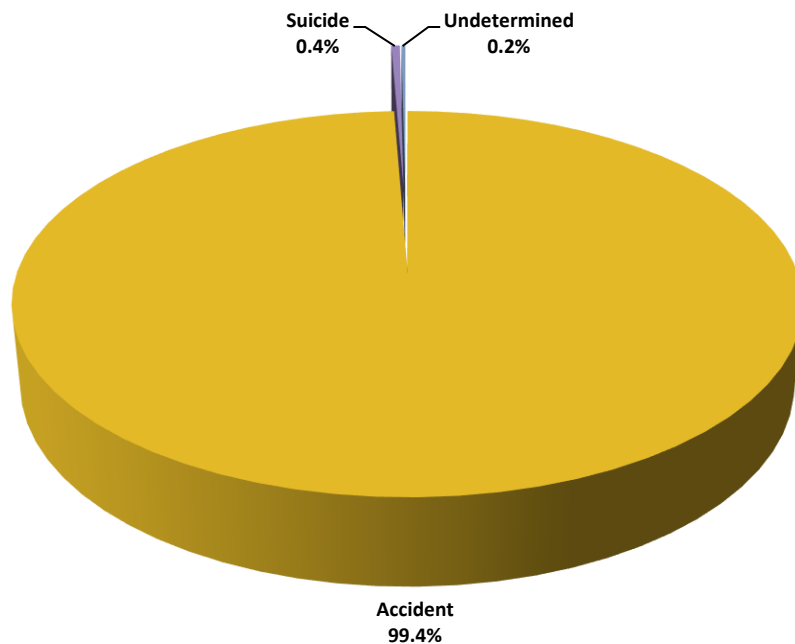


Figure 5.21 Number and Rate of Fatal Fentanyl and/or Heroin Overdoses by Age Group and Gender, 2021

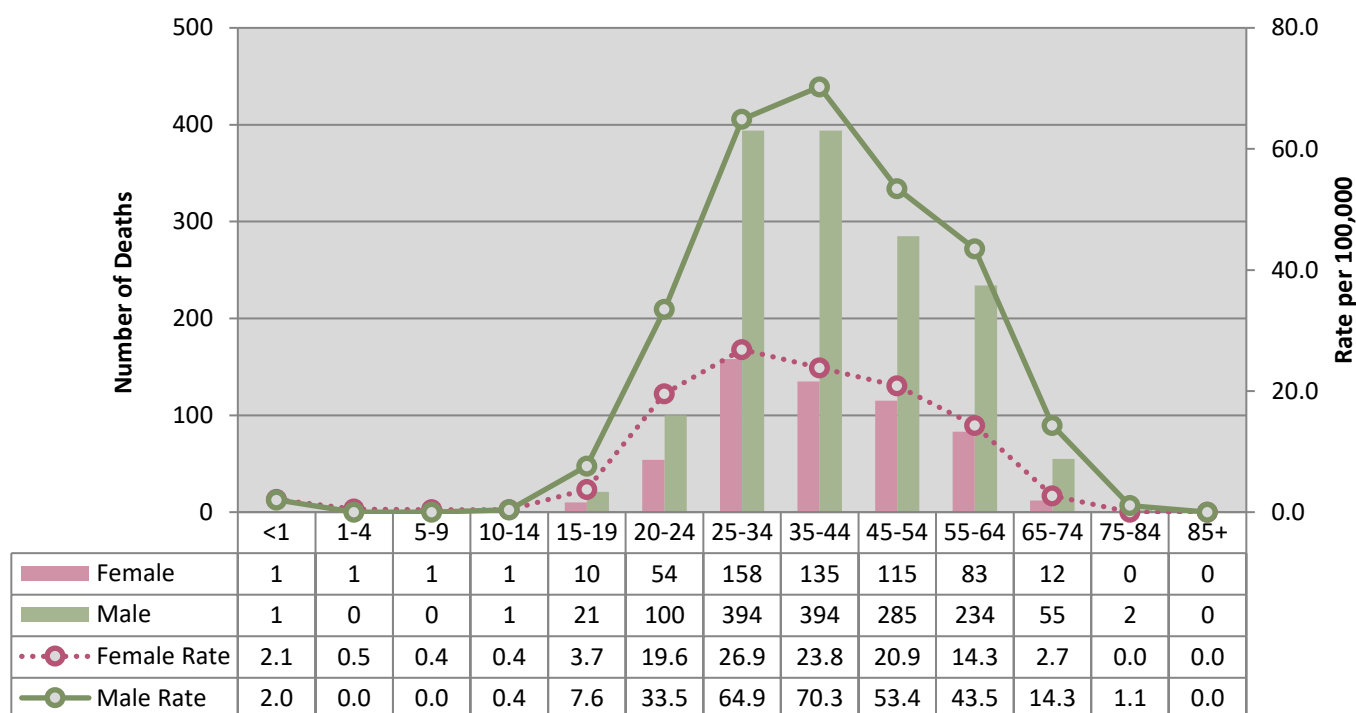


Figure 5.22 Percentage of Fatal Fentanyl and/or Heroin Overdoses by Race/Ethnicity, 2021

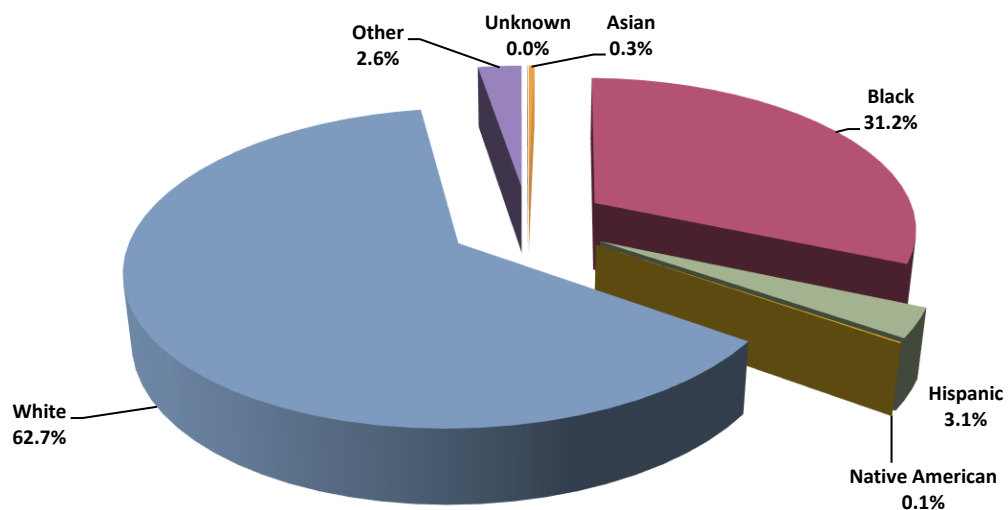


Figure 5.23 Number and Rate of Fatal Fentanyl and/or Heroin Overdoses by Race/Ethnicity and Gender, 2021



*No rate can be calculated

Note: Rates calculated from small case counts (n<5) are considered unreliable and should be interpreted with caution (Asiana and Native American males)

Table 5.14 Number and Percentage of Fatal Fentanyl and/or Heroin Overdoses by Whether Alcohol Caused Death, 2021

Whether Alcohol Played a Role in Death	Deaths	Percentage
Yes	254	12.3%
Contributed	97	4.7%
No	1707	82.9%
TOTAL	2058	100.0%

Table 5.15 Number and Rate of Fatal Fentanyl and/or Heroin Overdoses by Locality of Residence, 2021

Locality of Residence	Deaths	Rate
Accomack County	8	24.8
Albemarle County	12	10.8
Alexandria City	15	9.5
Alleghany County	4	27.2
Amelia County	3	23.1
Amherst County	9	28.4
Appomattox County	1	6.2
Arlington County	20	8.3
Augusta County	6	7.8
Bath County	0	0.0
Bedford County	19	23.8
Bland County	0	0.0
Botetourt County	9	26.8
Bristol City	2	11.5
Brunswick County	6	37.4
Buchanan County	1	4.9
Buckingham County	4	23.3
Buena Vista City	0	0.0
Campbell County	2	3.6
Caroline County	16	51.8
Carroll County	4	13.3
Charles City County	2	29.3
Charlotte County	7	59.2
Charlottesville City	11	23.4
Chesapeake City	49	19.8
Chesterfield County	124	34.6
Clarke County	4	27.4
Colonial Heights City	4	23.2
Covington City	1	17.7
Craig County	1	19.7
Culpeper County	19	35.5
Cumberland County	1	10.1
Danville City	7	17.6
Dickenson County	3	21.3
Dinwiddie County	10	34.9
Emporia City	4	76.1
Essex County	3	27.4
Fairfax City	2	8.5
Fairfax County	96	8.3

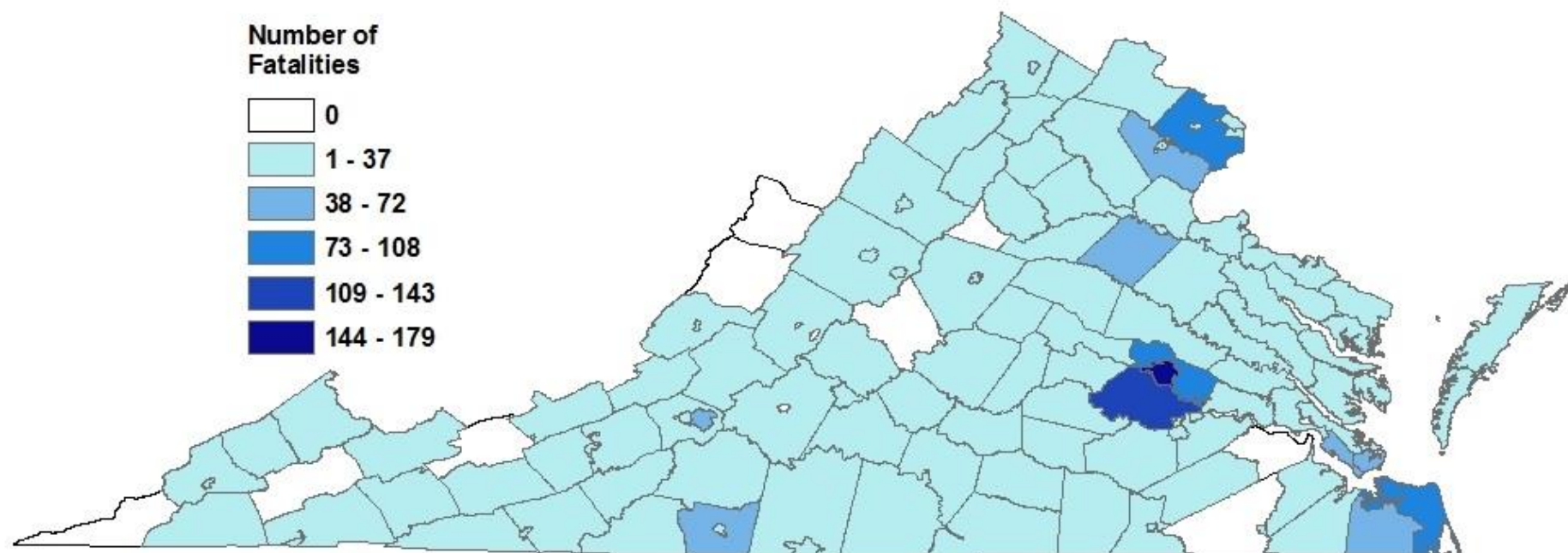
Locality of Residence	Deaths	Rate
Falls Church City	1	6.8
Fauquier County	13	18.2
Floyd County	1	6.3
Fluvanna County	3	10.9
Franklin City	1	12.8
Franklin County	18	32.0
Frederick County	9	9.9
Fredericksburg City	14	47.5
Galax City	2	31.8
Giles County	2	12.0
Gloucester County	10	26.7
Goochland County	3	12.3
Grayson County	2	12.9
Greene County	0	0.0
Greensville County	3	26.6
Halifax County	13	38.7
Hampton City	43	31.7
Hanover County	22	20.3
Harrisonburg City	3	5.6
Henrico County	104	31.2
Henry County	38	75.5
Highland County	0	0.0
Hopewell City	20	89.4
Isle of Wight County	7	18.6
James City County	10	12.9
King and Queen County	4	57.6
King George County	5	18.3
King William County	7	39.7
Lancaster County	2	18.8
Lee County	0	0.0
Lexington City	0	0.0
Loudoun County	29	6.9
Louisa County	14	36.7
Lunenburg County	1	8.2
Lynchburg City	22	27.0
Madison County	2	15.0
Manassas City	13	31.8
Manassas Park City	8	44.4
Martinsville City	4	32.4

Locality of Residence	Deaths	Rate
Mathews County	2	22.8
Mecklenburg County	10	32.6
Middlesex County	3	28.4
Montgomery County	11	11.2
Nelson County	0	0.0
New Kent County	9	38.1
Newport News City	55	30.7
Norfolk City	94	38.7
Northampton County	3	25.7
Northumberland County	6	49.7
Norton City	2	50.2
Nottoway County	4	26.4
Orange County	10	26.5
Page County	5	20.9
Patrick County	8	45.7
Petersburg City	28	92.0
Pittsylvania County	10	16.7
Poquoson City	4	32.6
Portsmouth City	77	81.0
Powhatan County	9	29.9
Prince Edward County	5	21.7
Prince George County	13	33.6
Prince William County	65	13.7
Pulaski County	14	41.3
Radford City	1	5.5
Rappahannock County	3	41.3
Richmond City	179	77.1
Richmond County	1	11.0
Roanoke City	60	60.6
Roanoke County	22	23.3
Rockbridge County	1	4.4

Locality of Residence	Deaths	Rate
Rockingham County	3	3.6
Russell County	0	0.0
Salem City	5	19.7
Scott County	2	9.2
Shenandoah County	6	13.7
Smyth County	4	13.3
Southampton County	0	0.0
Spotsylvania County	48	34.7
Stafford County	35	22.3
Staunton City	1	4.0
Suffolk City	32	34.1
Surry County	0	0.0
Sussex County	3	27.5
Tazewell County	14	34.5
Virginia Beach City	90	19.9
Warren County	15	37.1
Washington County	9	16.8
Waynesboro City	3	13.2
Westmoreland County	3	16.5
Williamsburg City	0	0.0
Winchester City	7	25.3
Wise County	14	37.6
Wythe County	2	7.0
York County	5	7.2
<i>Subtotal (in-state)</i>	1957	22.8
Out of State	94	ND
Unknown	7	ND
<i>Subtotal (out-of-state)</i>	101	ND
TOTAL	2058	24.0

Note: No denominator is represented by ND.

Map 5.9 Number of Fatal Fentanyl and/or Heroin Overdoses by Locality of Residence, 2021



Map 5.10 Rates of Fatal Fentanyl and/or Heroin Overdose by Locality of Residence, 2021

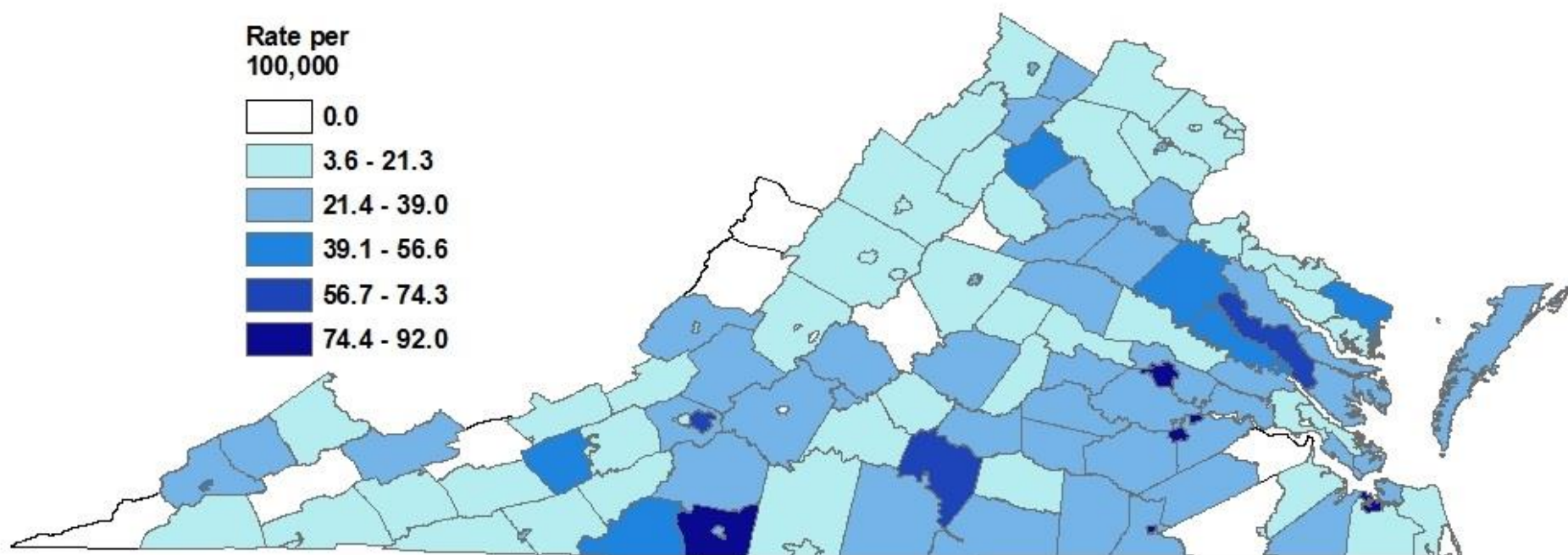


Table 5.16 Number and Rate of Fatal Fentanyl and/or Heroin Overdoses by Locality of Injury, 2021

Locality of Injury	Deaths	Rate
Accomack County	10	31.0
Albemarle County	11	9.9
Alexandria City	16	10.1
Alleghany County	4	27.2
Amelia County	2	15.4
Amherst County	8	25.3
Appomattox County	1	6.2
Arlington County	26	10.8
Augusta County	8	10.5
Bath County	0	0.0
Bedford County	15	18.8
Bland County	0	0.0
Botetourt County	6	17.8
Bristol City	5	28.9
Brunswick County	9	56.1
Buchanan County	1	4.9
Buckingham County	4	23.3
Buena Vista City	0	0.0
Campbell County	4	7.2
Caroline County	14	45.4
Carroll County	5	16.6
Charles City County	1	14.7
Charlotte County	7	59.2
Charlottesville City	15	31.9
Chesapeake City	45	18.2
Chesterfield County	99	27.6
Clarke County	3	20.5
Colonial Heights City	2	11.6
Covington City	1	17.7
Craig County	0	0.0
Culpeper County	19	35.5
Cumberland County	1	10.1
Danville City	8	20.1
Dickenson County	3	21.3
Dinwiddie County	7	24.4
Emporia City	4	76.1
Essex County	2	18.3
Fairfax City	3	12.8
Fairfax County	101	8.8
Falls Church City	0	0.0
Fauquier County	13	18.2
Floyd County	3	19.0

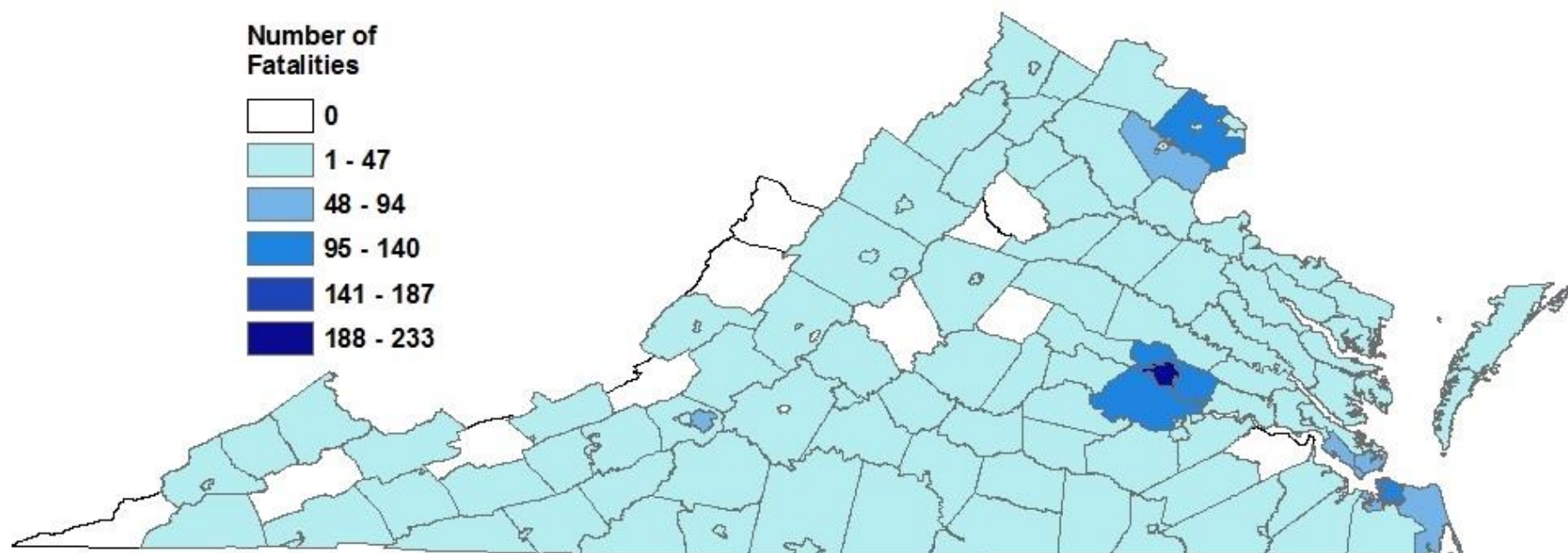
Locality of Injury	Deaths	Rate
Fluvanna County	0	0.0
Franklin City	1	12.8
Franklin County	15	26.7
Frederick County	12	13.2
Fredericksburg City	18	61.0
Galax City	1	15.9
Giles County	2	12.0
Gloucester County	8	21.4
Goochland County	5	20.5
Grayson County	2	12.9
Greene County	0	0.0
Greensville County	2	17.7
Halifax County	14	41.6
Hampton City	48	35.4
Hanover County	22	20.3
Harrisonburg City	4	7.5
Henrico County	118	35.4
Henry County	35	69.6
Highland County	0	0.0
Hopewell City	21	93.9
Isle of Wight County	2	5.3
James City County	4	5.2
King and Queen County	4	57.6
King George County	7	25.6
King William County	3	17.0
Lancaster County	1	9.4
Lee County	0	0.0
Lexington City	0	0.0
Loudoun County	23	5.4
Louisa County	12	31.5
Lunenburg County	3	24.5
Lynchburg City	24	29.4
Madison County	0	0.0
Manassas City	14	34.3
Manassas Park City	7	38.9
Martinsville City	7	56.7
Mathews County	1	11.4
Mecklenburg County	8	26.1
Middlesex County	5	47.3
Montgomery County	10	10.2
Nelson County	0	0.0
New Kent County	7	29.6

Locality of Injury	Deaths	Rate
Newport News City	66	36.9
Norfolk City	116	47.8
Northampton County	2	17.1
Northumberland County	3	24.9
Norton City	3	75.3
Nottoway County	2	13.2
Orange County	12	31.8
Page County	5	20.9
Patrick County	7	40.0
Petersburg City	36	118.2
Pittsylvania County	10	16.7
Poquoson City	3	24.5
Portsmouth City	87	91.5
Powhatan County	5	16.6
Prince Edward County	3	13.0
Prince George County	12	31.0
Prince William County	75	15.8
Pulaski County	11	32.4
Radford City	1	5.5
Rappahannock County	4	55.1
Richmond City	233	100.3
Richmond County	1	11.0
Roanoke City	72	72.7
Roanoke County	22	23.3
Rockbridge County	1	4.4
Rockingham County	3	3.6
Russell County	0	0.0
Salem City	5	19.7

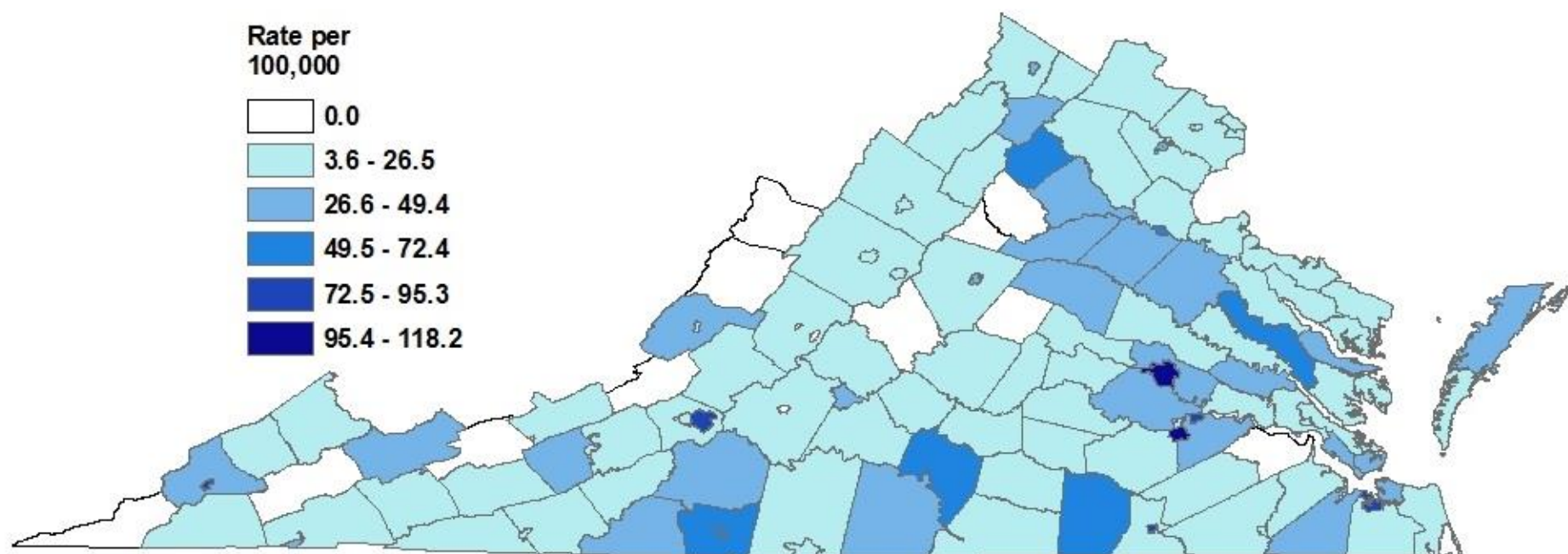
Locality of Injury	Deaths	Rate
Scott County	2	9.2
Shenandoah County	8	18.2
Smyth County	3	10.0
Southampton County	1	5.7
Spotsylvania County	43	31.1
Stafford County	30	19.1
Staunton City	2	7.9
Suffolk City	27	28.8
Surry County	0	0.0
Sussex County	2	18.3
Tazewell County	13	32.1
Virginia Beach City	87	19.3
Warren County	16	39.5
Washington County	8	14.9
Waynesboro City	2	8.8
Westmoreland County	2	11.0
Williamsburg City	1	6.6
Winchester City	8	28.9
Wise County	13	34.9
Wythe County	4	14.0
York County	5	7.2
<i>Subtotal (in-state)</i>	2033	23.7
Out of State	9	ND
Unknown	16	ND
<i>Subtotal (out-of-state)</i>	25	ND
TOTAL	2058	24.0

Note: No denominator is represented by ND.

Map 5.11 Number of Fatal Fentanyl and/or Heroin Overdoses by Locality of Injury, 2021



Map 5.12 Rates of Fatal Fentanyl and/or Heroin Overdose by Locality of Injury, 2021



ALL OPIOID DEATHS (N=2,229)

All fatal opioid overdoses include fatal overdoses that included at least fentanyl, heroin, and/or one or more prescription opioids. Fatal opioid overdoses increased in 2021 when compared to 2020 (16.4%) and represented 83.5% of all fatal drug overdose cases in 2021.

- Black males and males aged 35-44 years had the highest mortality rates compared to other demographic groups (59.6 and 72.8 deaths per 100,000 persons, respectively)
- Nearly 98% of all fatal opioid overdoses in 2021 were accidents
- Out of all opioids in 2021, fentanyl (Rx, illicit, and analogs) was responsible for the largest number of opioid deaths (91.5%)

Figure 5.24 Number and Rate of All Fatal Opioid Overdoses Year of Death, 2007-2021

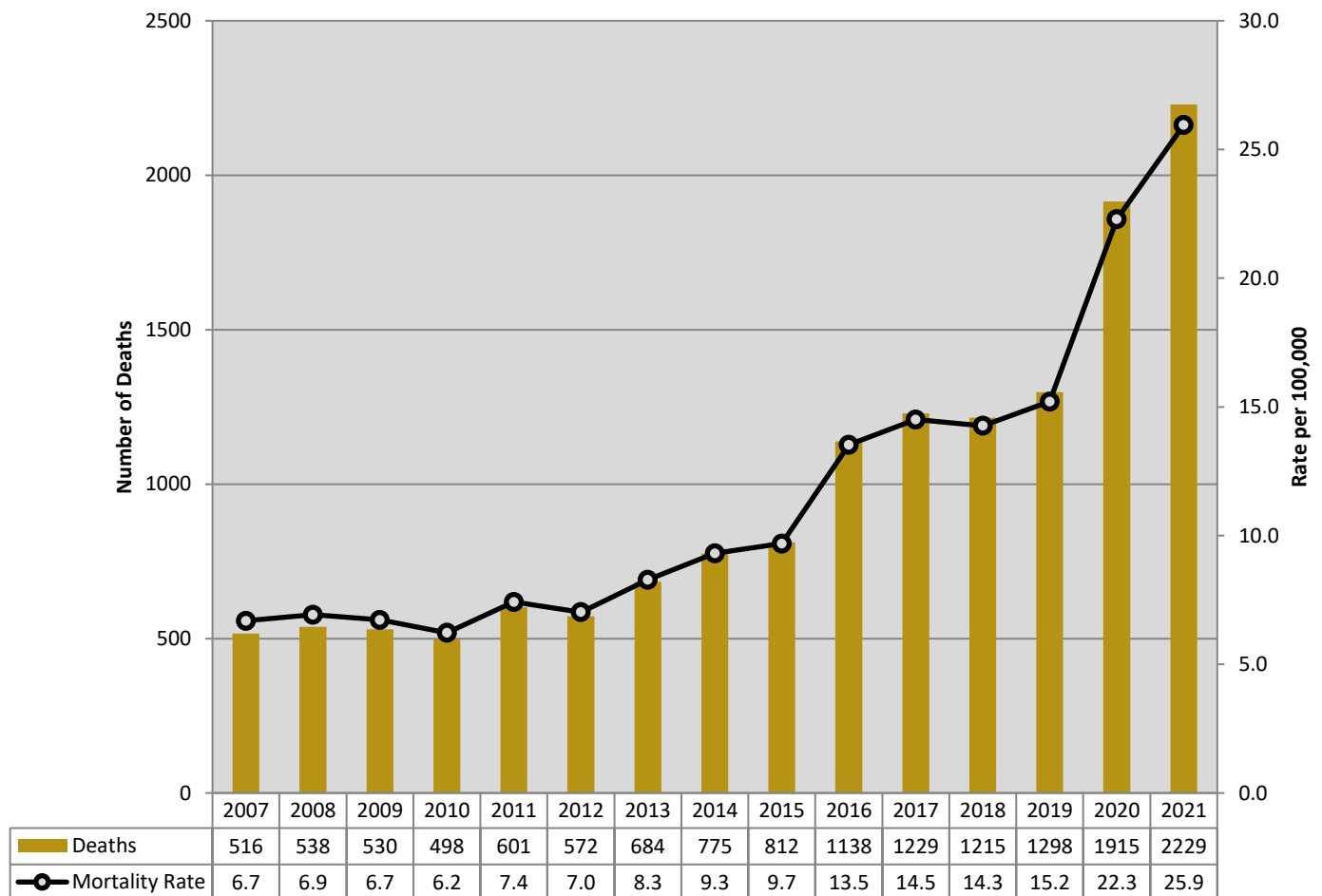


Table 5.17 Number of All Fatal Opioid Overdoses by Combination and OCME District, 2021

Drug Combination	Central	Northern	Tidewater	Western	Total
Fentanyl and/or heroin	697	314	437	315	1763
Fentanyl and/or heroin and one more prescription opioids (excluding fentanyl)	68	85	84	58	295
One or more prescription opioids (excluding fentanyl)	45	37	24	53	159
Opioids unspecified	1	2	3	6	12
Total	811	438	548	432	2229

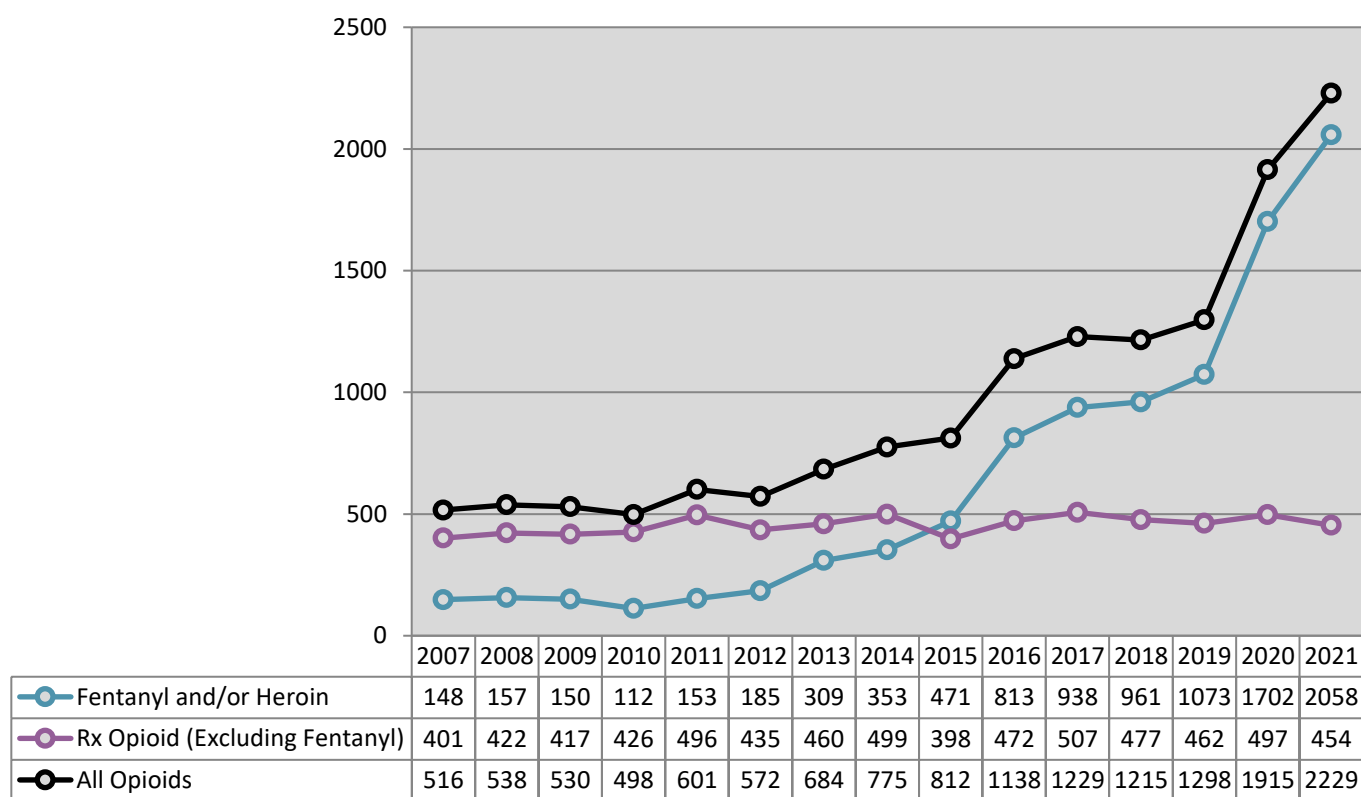
Figure 5.25 Percentage of All Fatal Opioid Overdoses by Manner of Death, 2021

Figure 5.26 Percentage of All Fatal Opioid Overdoses by Manner of Death, 2021

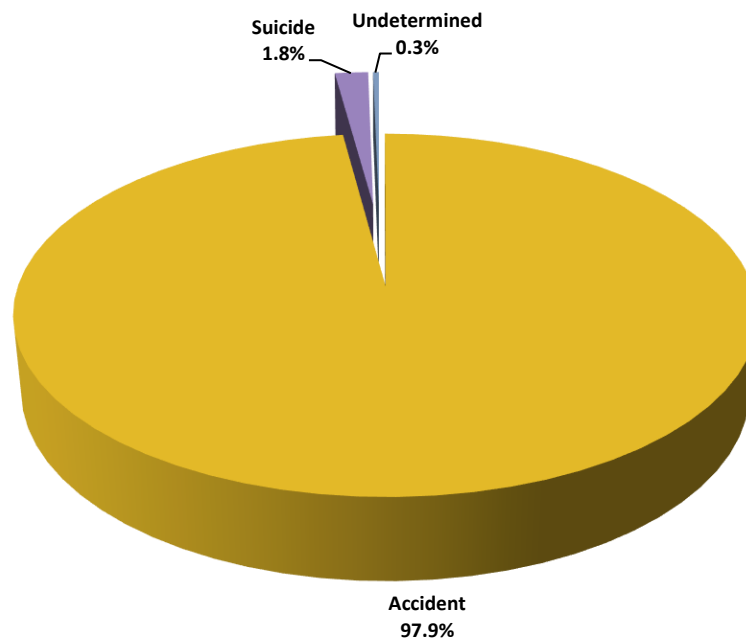


Figure 5.27 Number and Rate of All Fatal Opioid Overdoses by Age Group and Gender, 2021

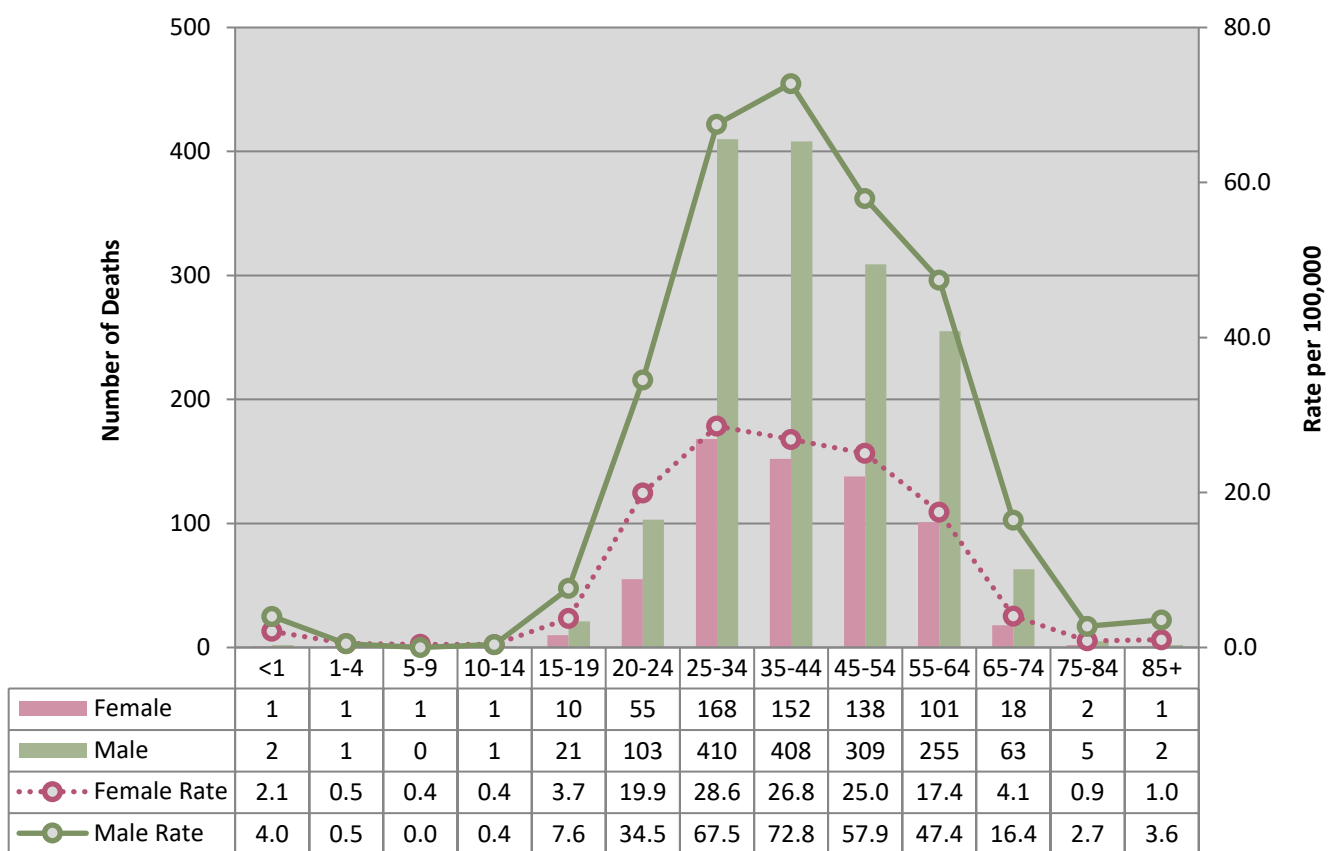


Figure 5.28 Percentage of All Fatal Opioid Overdoses by Race/Ethnicity, 2021

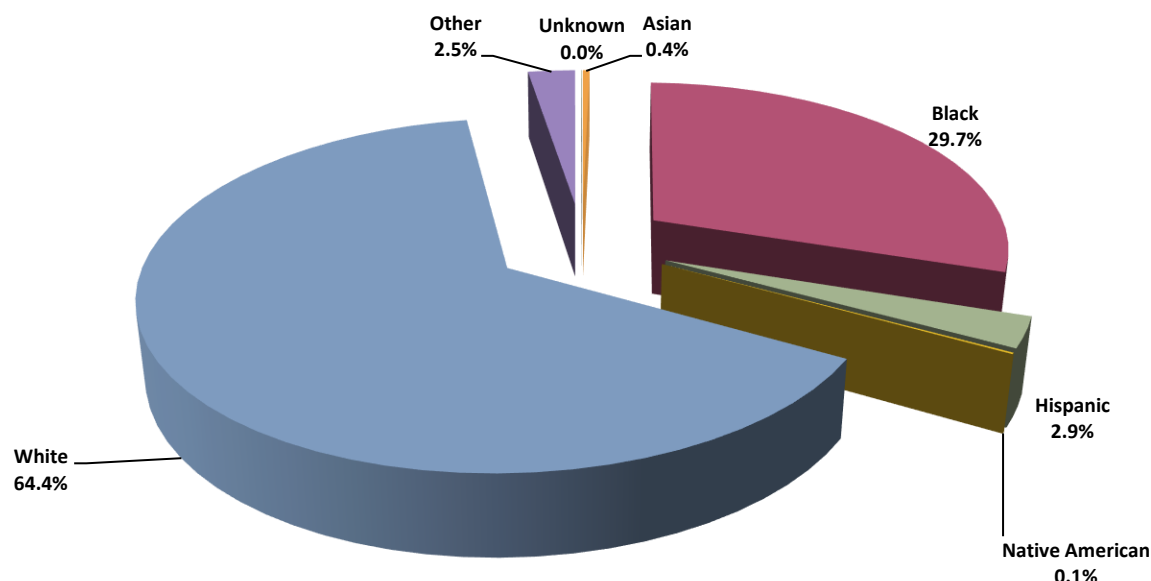
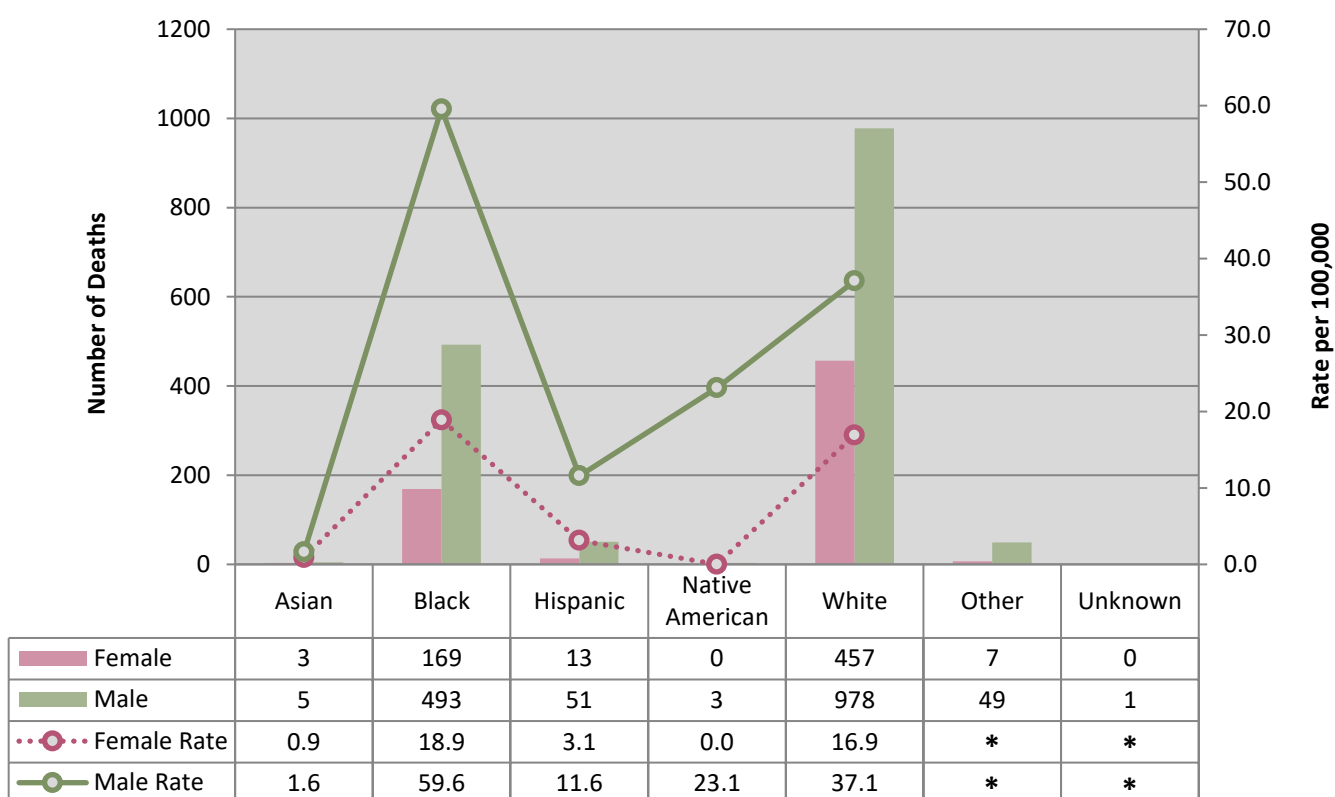
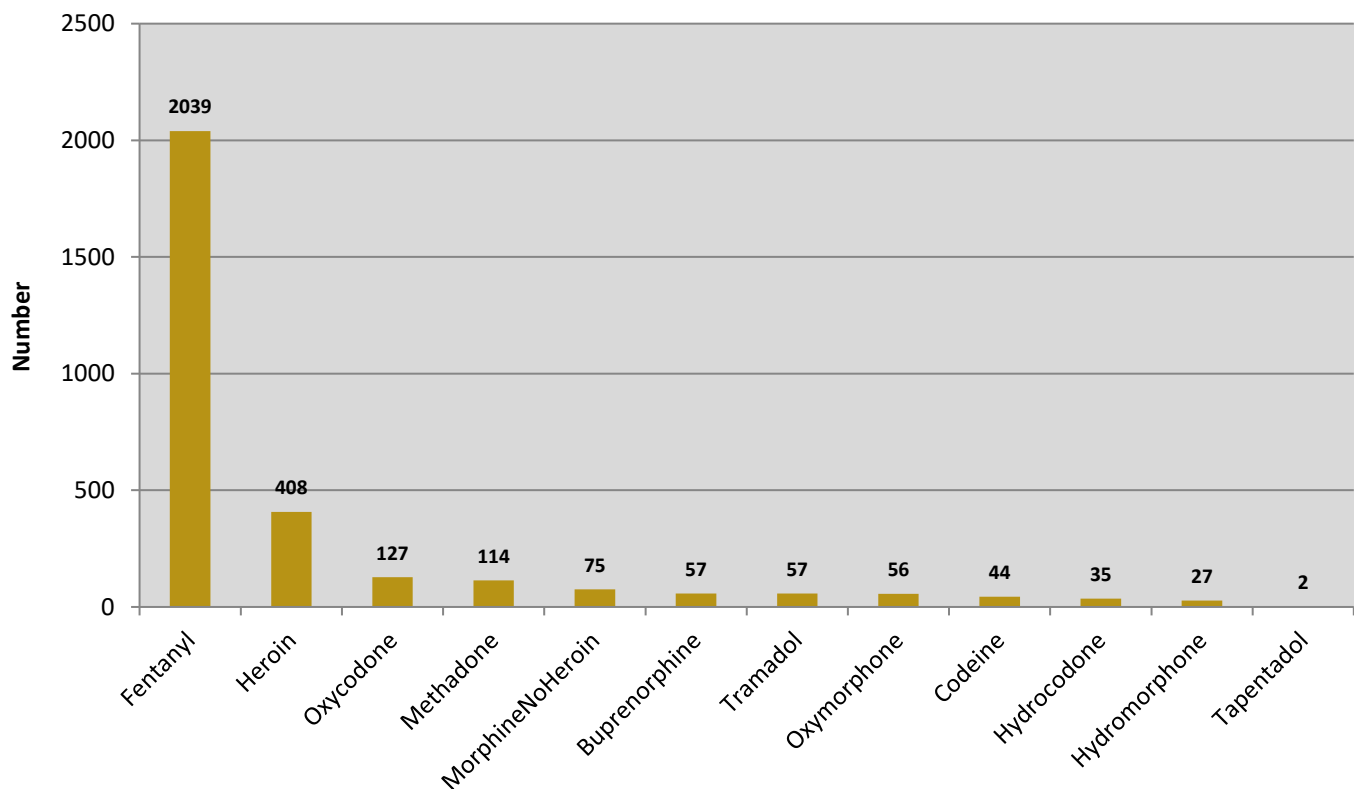


Figure 5.29 Number and Rate of All Fatal Opioid Overdoses by Race/Ethnicity and Gender, 2021



*No rate can be calculated

Note: Rates calculated from small case counts (n<5) are considered unreliable and should be interpreted with caution (Asian females and Native American males)

Figure 5.30 Number of Opioids Causing or Contributing to Fatal Opioid Overdoses, 2021**Table 5.18 Number and Percentage of All Fatal Opioid Overdoses by Whether Alcohol Caused Death, 2021**

Whether Alcohol Played a Role in Death	Deaths	Percentage
Yes	274	12.3%
Contributed	105	4.7%
No	1850	83.0%
TOTAL	2229	100.0%

Table 5.19 Number of All Fatal Opioid Overdoses by Locality of Residence, 2021

Locality of Residence	Deaths	Rate
Accomack County	8	24.8
Albemarle County	12	10.8
Alexandria City	16	10.1
Alleghany County	4	27.2
Amelia County	3	23.1
Amherst County	10	31.6
Appomattox County	2	12.5
Arlington County	22	9.2
Augusta County	8	10.5
Bath County	0	0.0
Bedford County	20	25.1
Bland County	0	0.0
Botetourt County	11	32.7
Bristol City	3	17.3
Brunswick County	6	37.4
Buchanan County	3	14.6
Buckingham County	4	23.3
Buena Vista City	1	15.6
Campbell County	2	3.6
Caroline County	19	61.6
Carroll County	6	20.0
Charles City County	2	29.3
Charlotte County	7	59.2
Charlottesville City	11	23.4
Chesapeake City	50	20.2
Chesterfield County	129	36.0
Clarke County	5	34.2
Colonial Heights City	6	34.9
Covington City	1	17.7
Craig County	1	19.7
Culpeper County	21	39.2
Cumberland County	1	10.1
Danville City	9	22.6
Dickenson County	5	35.5
Dinwiddie County	10	34.9
Emporia City	5	95.1
Essex County	3	27.4
Fairfax City	2	8.5
Fairfax County	103	8.9
Falls Church City	1	6.8
Fauquier County	15	21.0
Floyd County	3	19.0
Fluvanna County	5	18.2

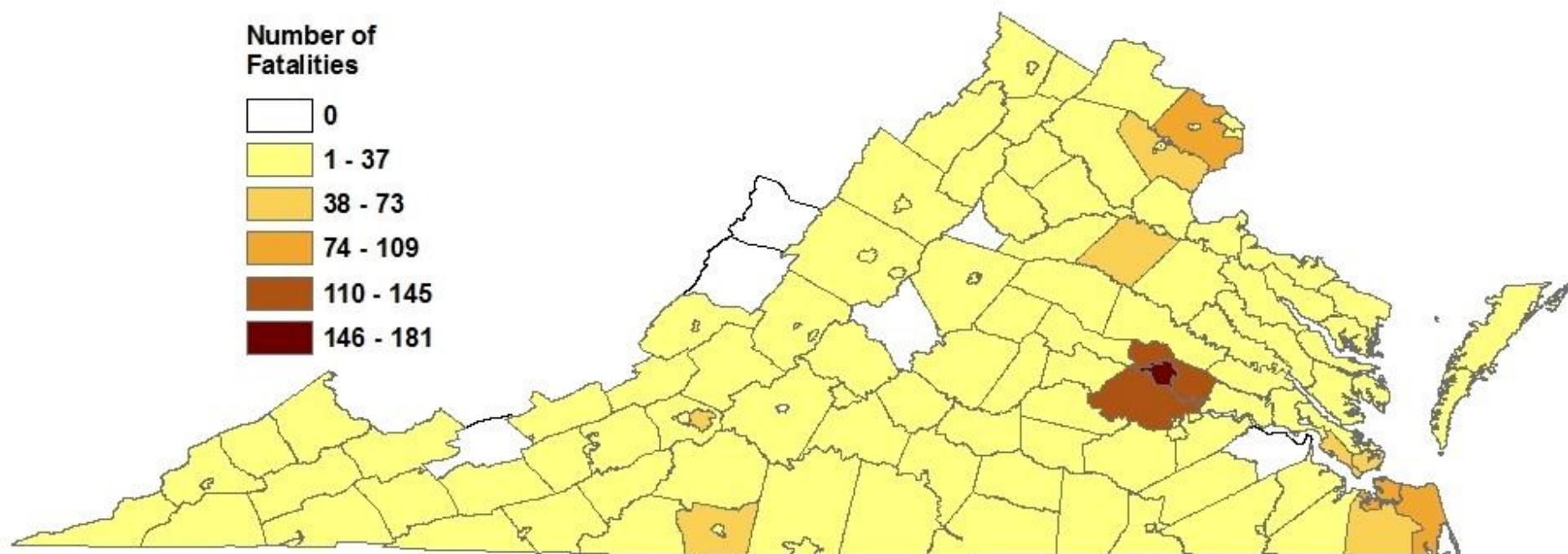
Locality of Residence	Deaths	Rate
Franklin City	1	12.8
Franklin County	19	33.8
Frederick County	13	14.3
Fredericksburg City	16	54.3
Galax City	2	31.8
Giles County	2	12.0
Gloucester County	12	32.0
Goochland County	3	12.3
Grayson County	2	12.9
Greene County	0	0.0
Greensville County	3	26.6
Halifax County	13	38.7
Hampton City	44	32.5
Hanover County	23	21.2
Harrisonburg City	3	5.6
Henrico County	112	33.6
Henry County	41	81.5
Highland County	0	0.0
Hopewell City	21	93.9
Isle of Wight County	8	21.2
James City County	11	14.2
King and Queen County	4	57.6
King George County	5	18.3
King William County	8	45.3
Lancaster County	2	18.8
Lee County	1	4.3
Lexington City	0	0.0
Loudoun County	35	8.3
Louisa County	16	42.0
Lunenburg County	1	8.2
Lynchburg City	22	27.0
Madison County	2	15.0
Manassas City	14	34.3
Manassas Park City	8	44.4
Martinsville City	6	48.6
Mathews County	3	34.2
Mecklenburg County	10	32.6
Middlesex County	3	28.4
Montgomery County	14	14.2
Nelson County	0	0.0
New Kent County	10	42.3
Newport News City	58	32.4
Norfolk City	97	40.0

Locality of Residence	Deaths	Rate
Northampton County	4	34.3
Northumberland County	8	66.3
Norton City	2	50.2
Nottoway County	4	26.4
Orange County	12	31.8
Page County	6	25.1
Patrick County	8	45.7
Petersburg City	29	95.3
Pittsylvania County	11	18.4
Poquoson City	4	32.6
Portsmouth City	81	85.2
Powhatan County	10	33.2
Prince Edward County	5	21.7
Prince George County	15	38.8
Prince William County	73	15.4
Pulaski County	16	47.1
Radford City	1	5.5
Rappahannock County	3	41.3
Richmond City	181	77.9
Richmond County	1	11.0
Roanoke City	63	63.6
Roanoke County	27	28.6
Rockbridge County	1	4.4
Rockingham County	3	3.6
Russell County	2	7.5
Salem City	5	19.7
Scott County	2	9.2

Locality of Residence	Deaths	Rate
Shenandoah County	7	15.9
Smyth County	4	13.3
Southampton County	3	17.0
Spotsylvania County	53	38.3
Stafford County	36	23.0
Staunton City	1	4.0
Suffolk City	32	34.1
Surry County	0	0.0
Sussex County	3	27.5
Tazewell County	20	49.3
Virginia Beach City	95	21.1
Warren County	15	37.1
Washington County	11	20.5
Waynesboro City	3	13.2
Westmoreland County	3	16.5
Williamsburg City	0	0.0
Winchester City	8	28.9
Wise County	17	45.7
Wythe County	2	7.0
York County	5	7.2
<i>Subtotal (in-state)</i>	2118	24.7
Out of State	102	ND
Unknown	9	ND
<i>Subtotal (out-of-state)</i>	111	ND
TOTAL	2229	25.9

Note: No denominator is represented by ND.

Map 5.13 Number of All Fatal Opioid Overdoses by Locality of Residence, 2021



Map 5.14 Rates of All Fatal Opioid Overdoses by Locality of Residence, 2021

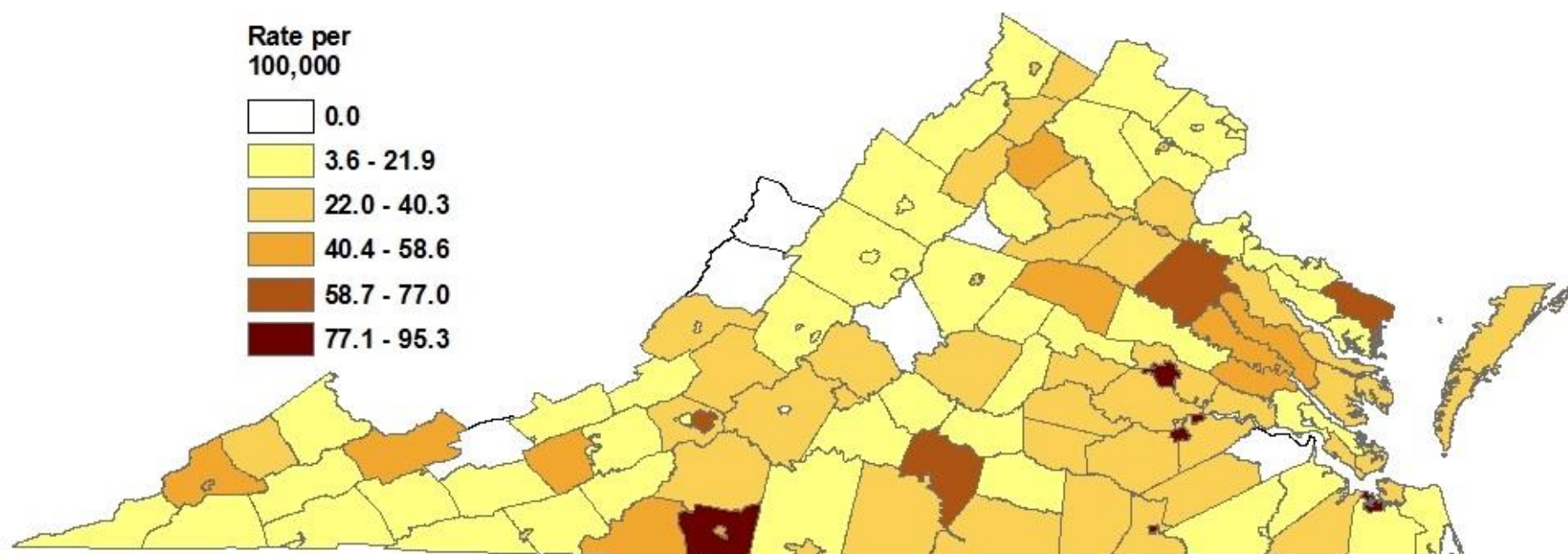


Table 5.20 Number and Rate of All Fatal Opioid Overdoses by Locality of Injury, 2021

Locality of Injury	Deaths	Rate
Accomack County	10	31.0
Albemarle County	11	9.9
Alexandria City	17	10.7
Alleghany County	4	27.2
Amelia County	2	15.4
Amherst County	9	28.4
Appomattox County	2	12.5
Arlington County	28	11.7
Augusta County	10	13.1
Bath County	0	0.0
Bedford County	16	20.0
Bland County	0	0.0
Botetourt County	7	20.8
Bristol City	6	34.6
Brunswick County	9	56.1
Buchanan County	3	14.6
Buckingham County	4	23.3
Buena Vista City	1	15.6
Campbell County	4	7.2
Caroline County	18	58.3
Carroll County	7	23.3
Charles City County	1	14.7
Charlotte County	7	59.2
Charlottesville City	16	34.1
Chesapeake City	47	19.0
Chesterfield County	105	29.3
Clarke County	3	20.5
Colonial Heights City	4	23.2
Covington City	1	17.7
Craig County	0	0.0
Culpeper County	21	39.2
Cumberland County	1	10.1
Danville City	11	27.6
Dickenson County	5	35.5
Dinwiddie County	7	24.4
Emporia City	4	76.1
Essex County	2	18.3
Fairfax City	3	12.8
Fairfax County	108	9.4
Falls Church City	0	0.0
Fauquier County	14	19.6
Floyd County	5	31.7
Fluvanna County	2	7.3

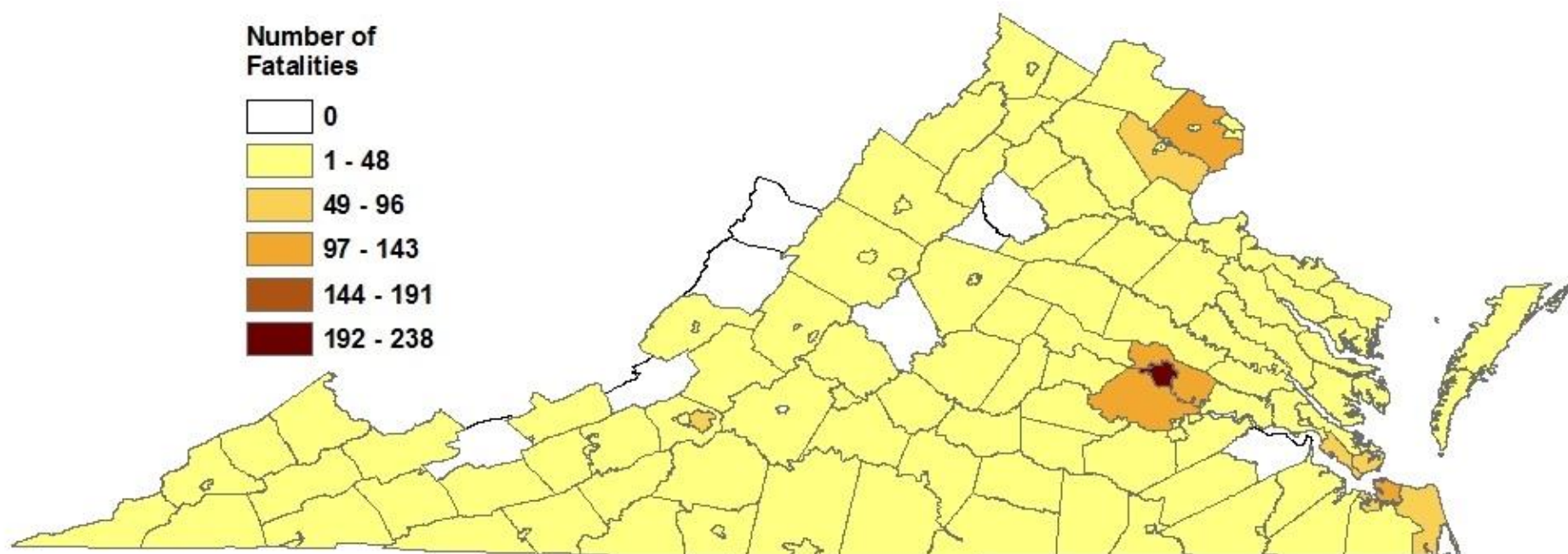
Locality of Injury	Deaths	Rate
Franklin City	1	12.8
Franklin County	16	28.5
Frederick County	18	19.8
Fredericksburg City	20	67.8
Galax City	1	15.9
Giles County	2	12.0
Gloucester County	10	26.7
Goochland County	5	20.5
Grayson County	2	12.9
Greene County	0	0.0
Greensville County	3	26.6
Halifax County	14	41.6
Hampton City	49	36.2
Hanover County	22	20.3
Harrisonburg City	4	7.5
Henrico County	126	37.8
Henry County	38	75.5
Highland County	0	0.0
Hopewell City	22	98.3
Isle of Wight County	3	8.0
James City County	5	6.4
King and Queen County	4	57.6
King George County	7	25.6
King William County	4	22.7
Lancaster County	1	9.4
Lee County	2	8.6
Lexington City	0	0.0
Loudoun County	29	6.9
Louisa County	14	36.7
Lunenburg County	3	24.5
Lynchburg City	24	29.4
Madison County	0	0.0
Manassas City	15	36.7
Manassas Park City	7	38.9
Martinsville City	9	72.8
Mathews County	2	22.8
Mecklenburg County	8	26.1
Middlesex County	5	47.3
Montgomery County	13	13.2
Nelson County	0	0.0
New Kent County	8	33.8
Newport News City	69	38.5
Norfolk City	120	49.4

Locality of Injury	Deaths	Rate
Northampton County	3	25.7
Northumberland County	4	33.1
Norton City	3	75.3
Nottoway County	2	13.2
Orange County	13	34.5
Page County	6	25.1
Patrick County	7	40.0
Petersburg City	37	121.5
Pittsylvania County	11	18.4
Poquoson City	3	24.5
Portsmouth City	91	95.7
Powhatan County	7	23.2
Prince Edward County	3	13.0
Prince George County	13	33.6
Prince William County	83	17.5
Pulaski County	14	41.3
Radford City	1	5.5
Rappahannock County	4	55.1
Richmond City	238	102.5
Richmond County	1	11.0
Roanoke City	74	74.7
Roanoke County	29	30.7
Rockbridge County	1	4.4
Rockingham County	3	3.6
Russell County	2	7.5
Salem City	5	19.7
Scott County	2	9.2

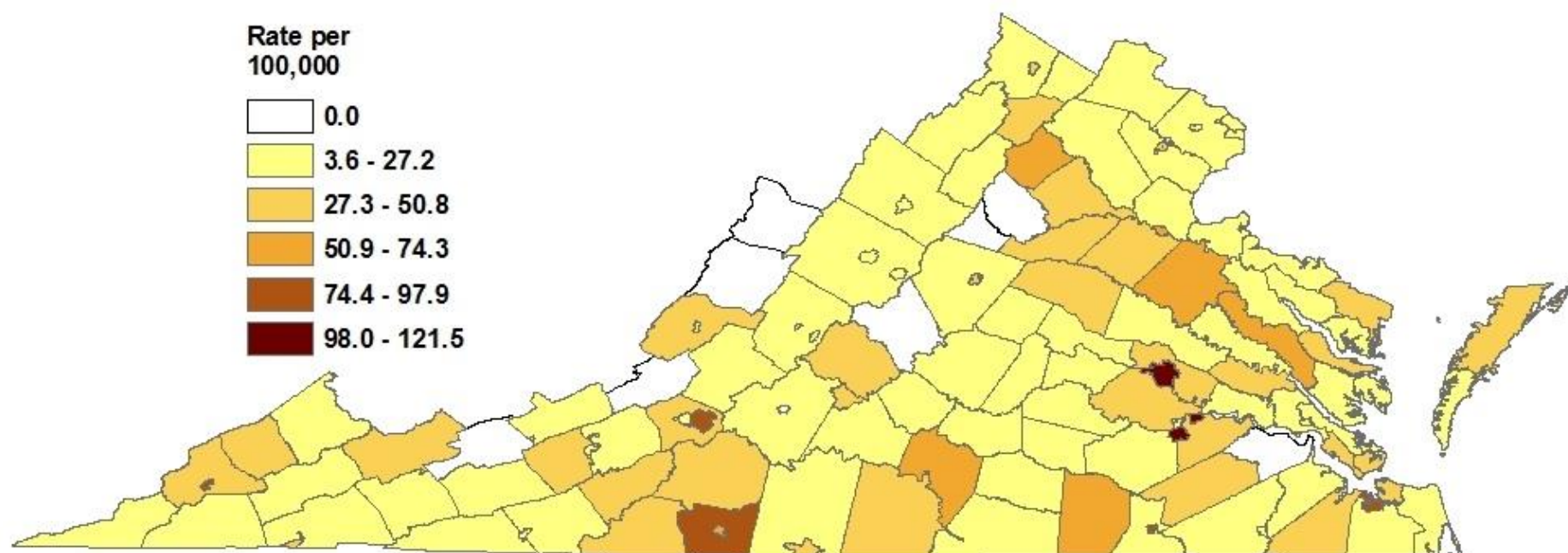
Locality of Injury	Deaths	Rate
Shenandoah County	9	20.5
Smyth County	3	10.0
Southampton County	4	22.7
Spotsylvania County	47	33.9
Stafford County	32	20.4
Staunton City	2	7.9
Suffolk City	27	28.8
Surry County	0	0.0
Sussex County	3	27.5
Tazewell County	19	46.9
Virginia Beach City	91	20.2
Warren County	16	39.5
Washington County	11	20.5
Waynesboro City	2	8.8
Westmoreland County	2	11.0
Williamsburg City	1	6.6
Winchester City	8	28.9
Wise County	15	40.3
Wythe County	4	14.0
York County	5	7.2
<i>Subtotal (in-state)</i>	2201	25.6
Out of State	11	ND
Unknown	17	ND
<i>Subtotal (out-of-state)</i>	28	ND
TOTAL	2229	25.9

Note: No denominator is represented by ND.

Map 5.15 Number of All Fatal Opioid Overdoses by Locality of Injury, 2021



Map 5.16 Rates of All Fatal Opioid Overdoses by Locality of Injury, 2021



SECTION 6: GUN-RELATED DEATHS (N=1,255)

Gun-related fatalities continue to be one of the top three methods of unnatural death in Virginia since 2007. Generally, the number of gun-related suicides slowly increase each year, and since 2012, gun-related homicides slowly increased. In 2021, gun-related deaths of all manners increased 5.0% compared to 2020.

- The majority (57.1%) of gun related deaths were due to suicide
- Gun-related homicides increased 11.2% in 2021 compared to 2020
- The Northern OCME region had the lowest number and the lowest rate of gun-related death of all manners (6.7 deaths per 100,000 persons) compared to all other OCME district offices
- Males (86.1%), 25-34 year olds (22.2%), and Whites (55.2%) had the largest number of gun-related deaths; however, males aged 20-24 years of age and Black males had the highest rate of gun-related death (56.3 and 51.2 deaths per 100,000 persons, respectively)

Figure 6.1 Number and Rate of Gun-Related Deaths by Year of Death, 2007-2021

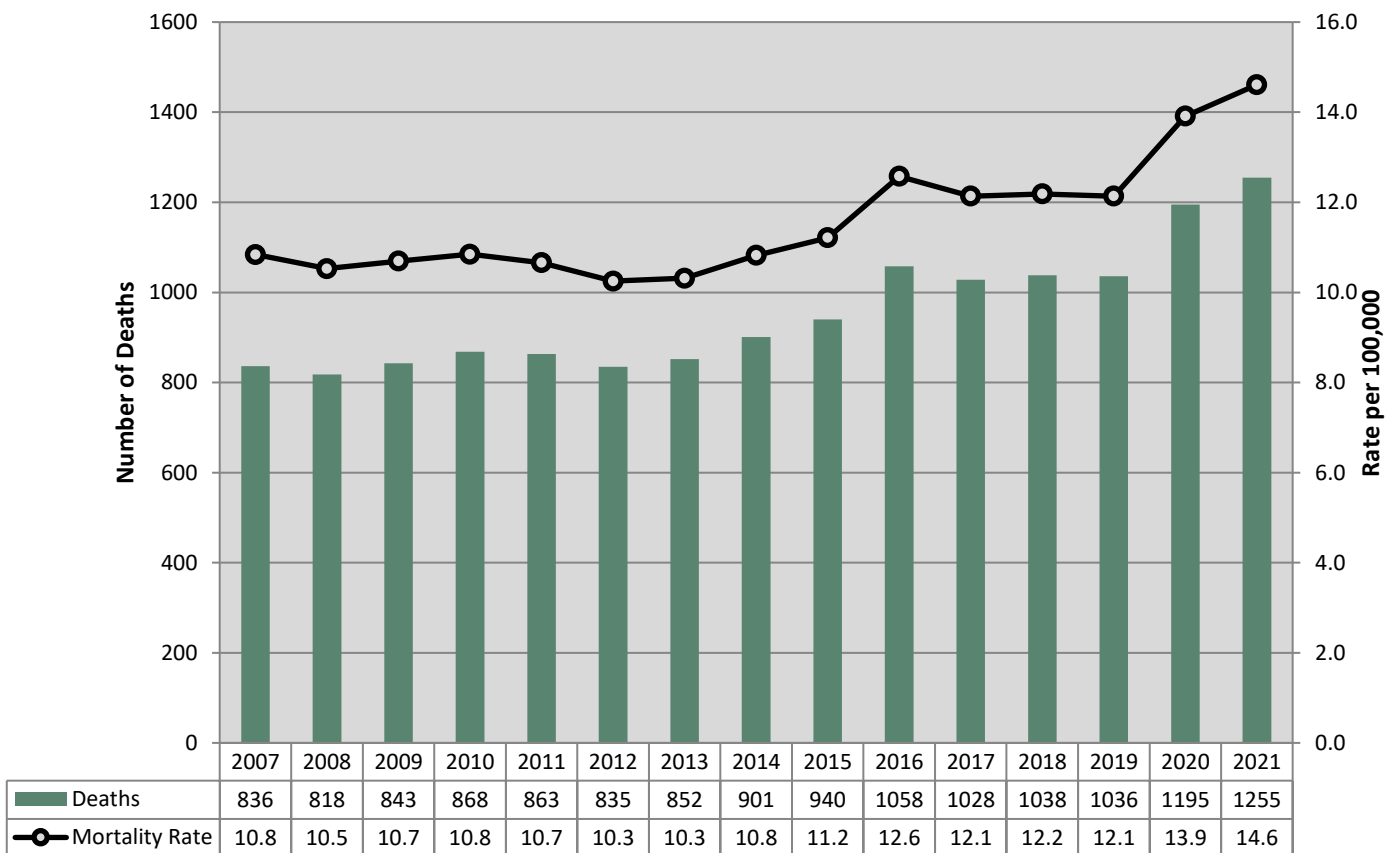


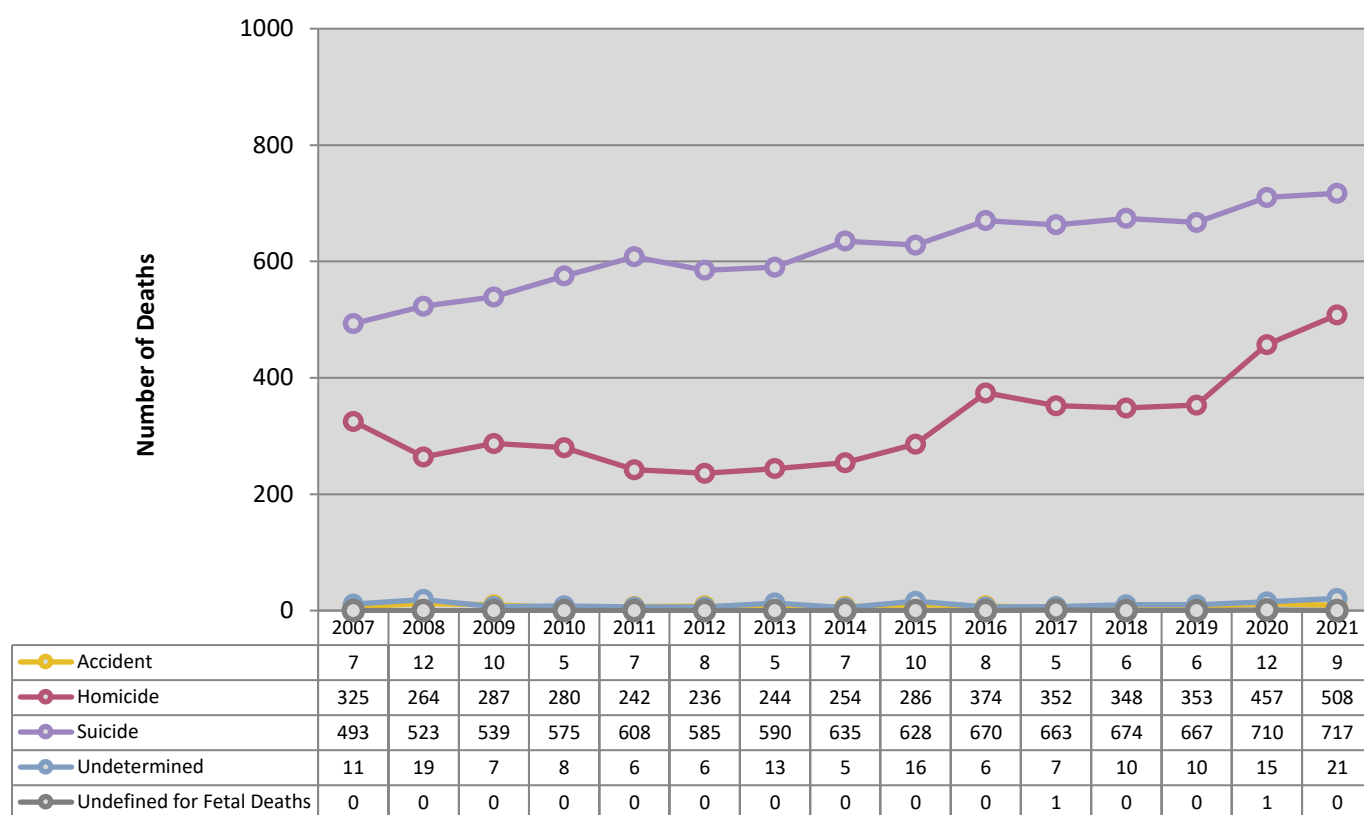
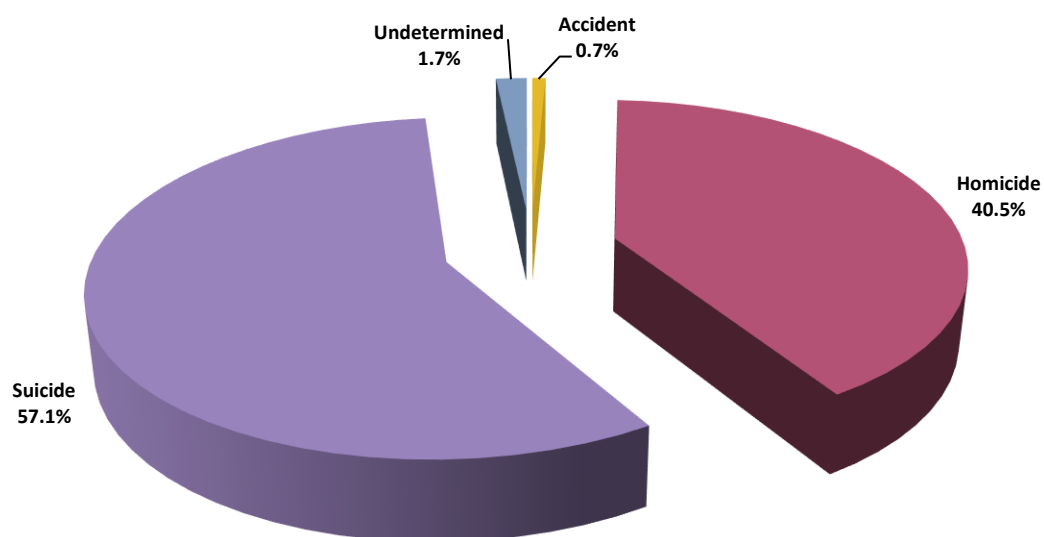
Figure 6.2 Number of Gun-Related Deaths by Year and Manner of Death, 2007-2021**Figure 6.3 Percentage of Gun-Related Deaths by Manner of Death, 2021**

Table 6.1 Number and Rate of Gun-Related Deaths by OCME District and Manner of Death, 2021

Manner of Death	Central		Northern		Tidewater		Western		TOTAL	
	n	rate	n	rate	n	rate	n	rate	n	rate
Accident	3	0.1	2	0.1	1	0.1	3	0.2	9	0.1
Homicide	179	7.6	48	1.6	204	12.5	77	4.7	508	5.9
Suicide	209	8.9	148	5.0	162	9.9	198	12.1	717	8.3
Undetermined	2	0.1	2	0.1	13	0.8	4	0.2	21	0.2
TOTAL	393	16.7	200	6.7	380	23.3	282	17.2	1255	14.6

Table 6.2 Number of Gun-Related Deaths by Gun Type and Manner of Death, 2021

Manner of Death	Handgun	Multiple*	Rifle	Shotgun	Unknown	Total
Accident	7	0	0	1	1	9
Homicide	316	10	24	7	151	508
Suicide	610	0	48	56	3	717
Undetermined	16	0	1	1	3	21
Total	949	10	73	65	158	1255

Note: 'Multiple' indicates the decedent died of more than one gun; either more than one gun type (e.g. a handgun and a shotgun) or same gun type but multiple weapons (e.g. two handguns)

Figure 6.4 Percentage of Gun-Related Deaths by Gender, 2021

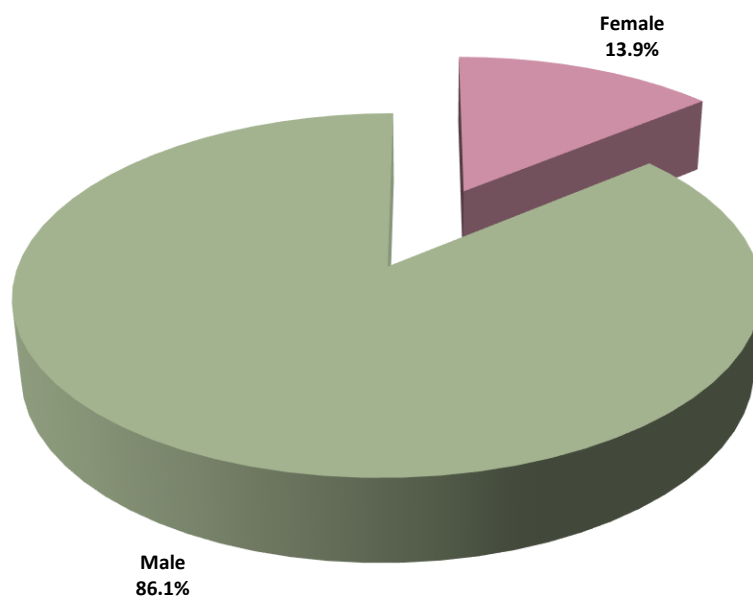


Figure 6.5 Number and Rate of Gun-Related Deaths by Age Group and Gender, 2021

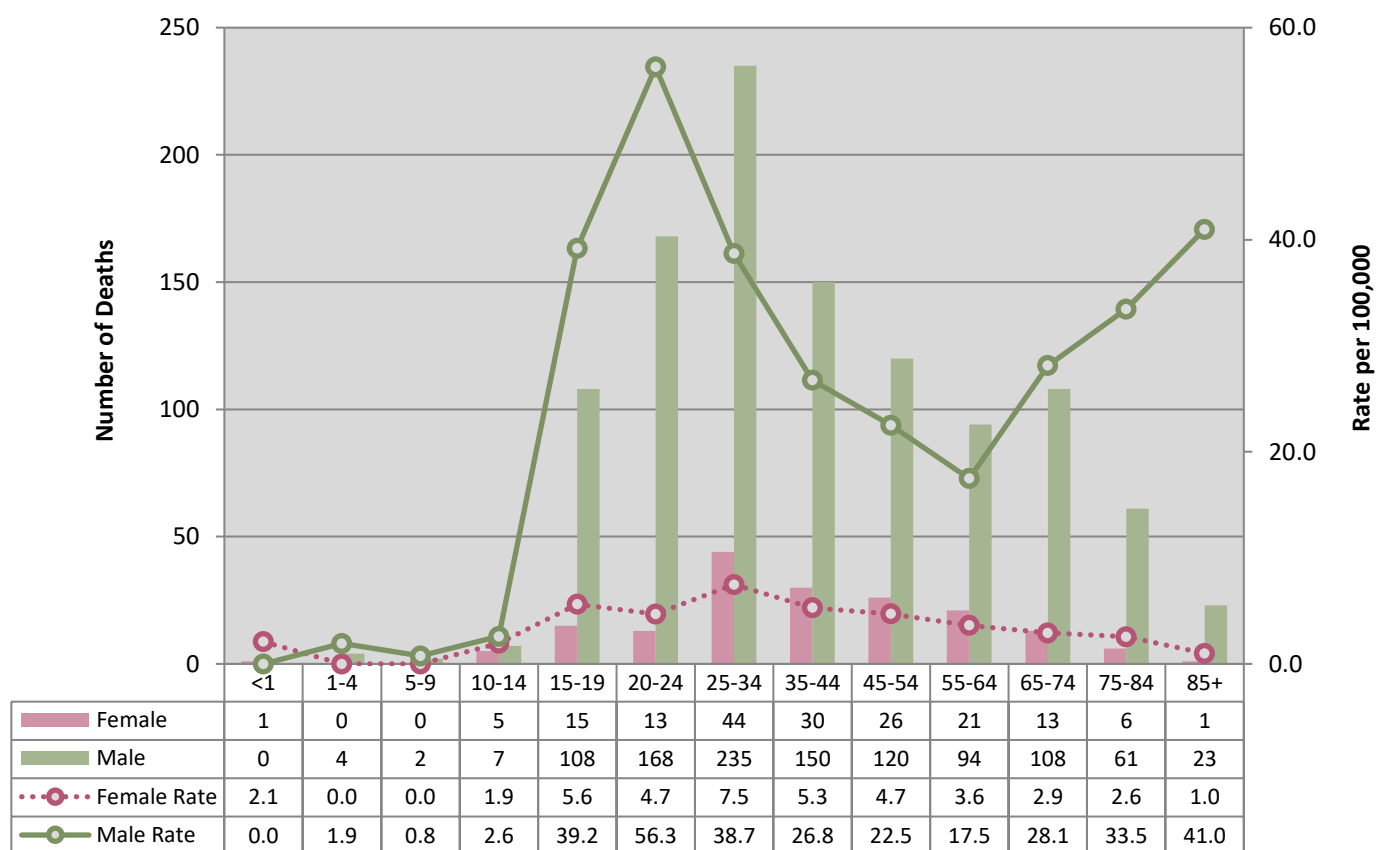


Figure 6.6 Percentage of Gun-Related Deaths by Race/Ethnicity, 2021

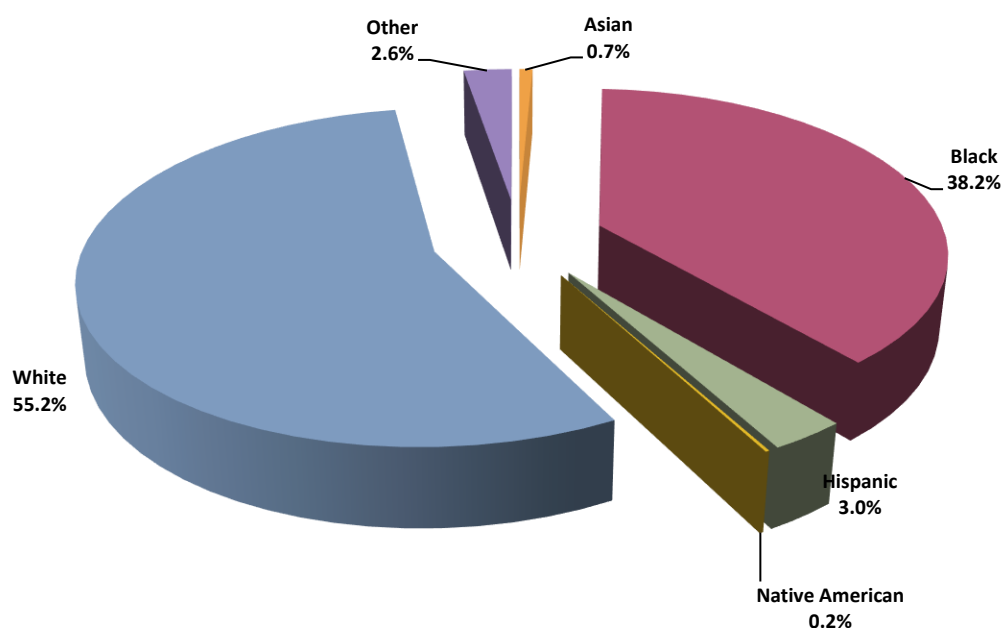
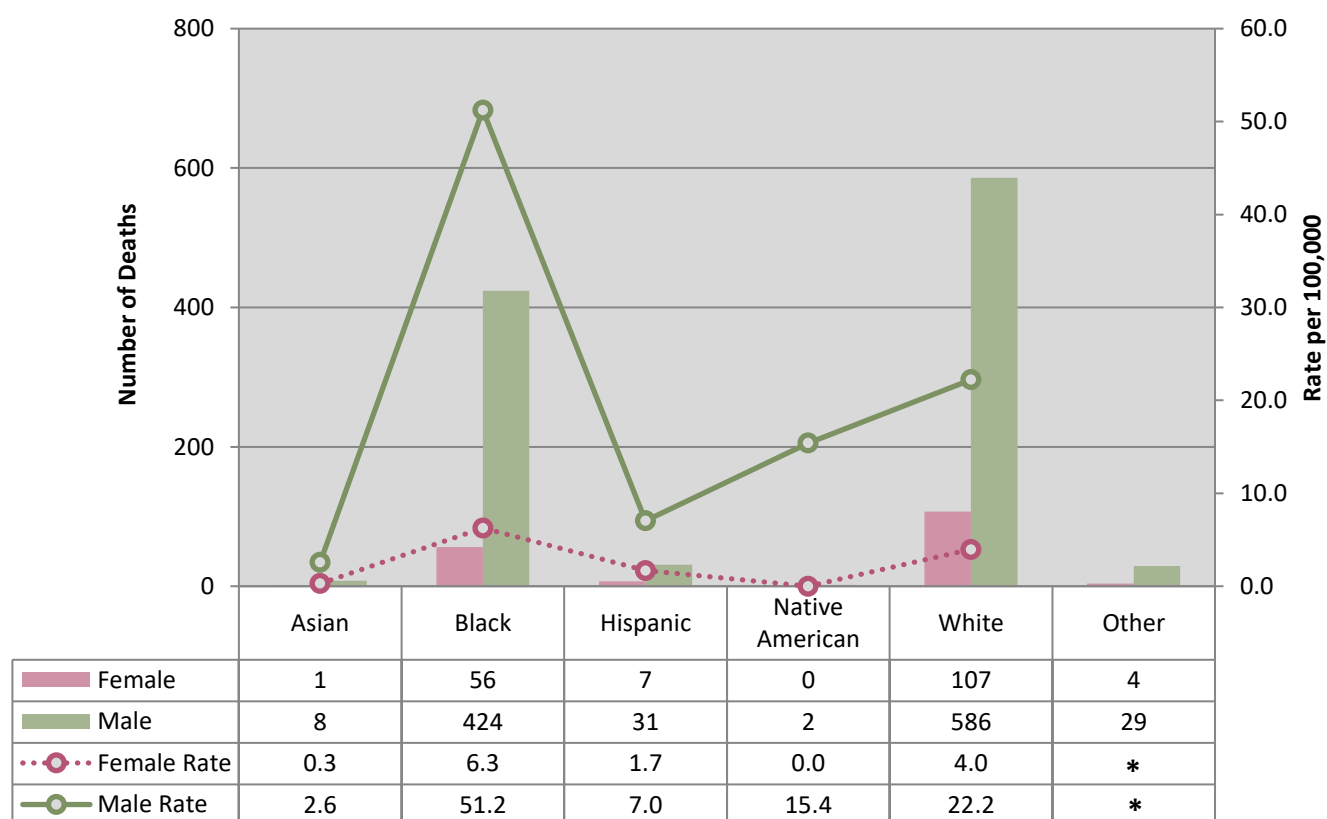


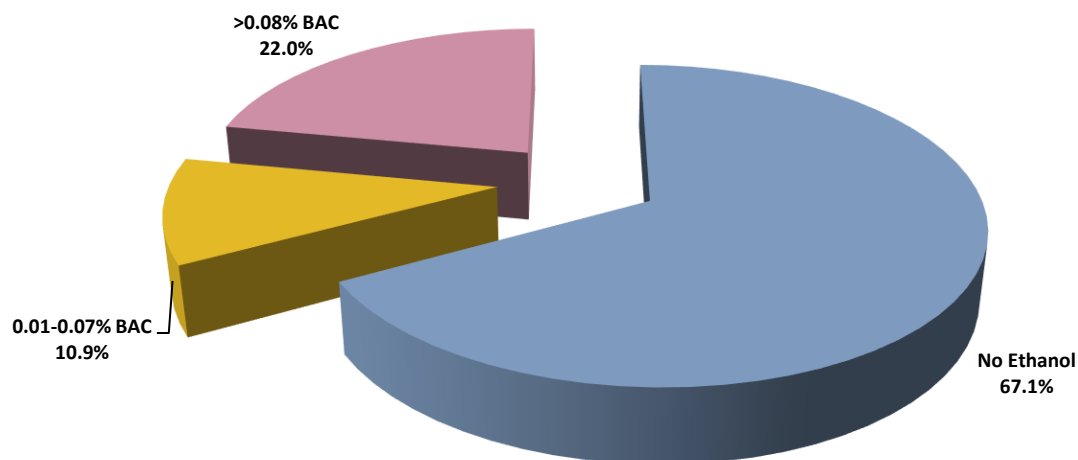
Figure 6.7 Number and Rate of Gun-Related Deaths by Race/Ethnicity and Gender, 2021



*No rate can be calculated

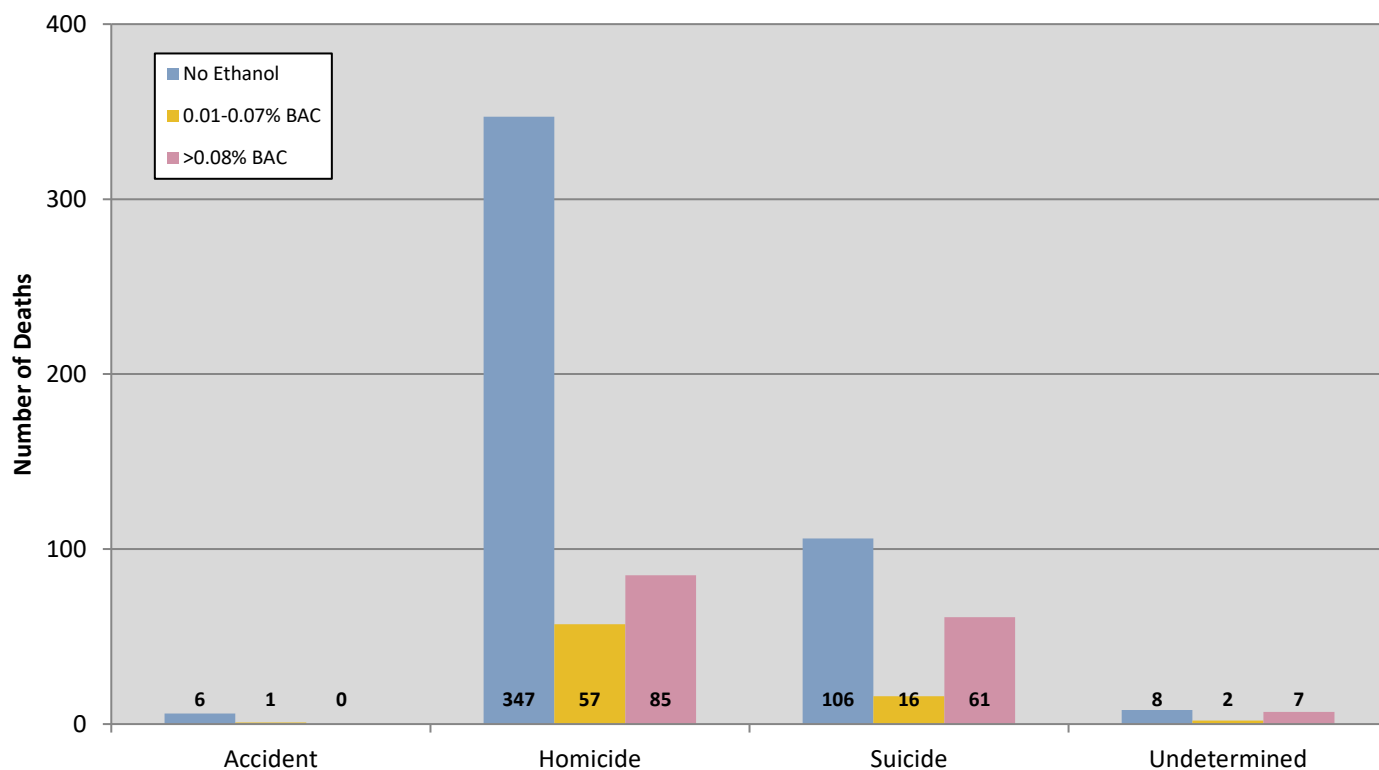
Note: Rates calculated from small case counts (n<5) are considered unreliable and should be interpreted with caution (Asian females and Native American males)

Figure 6.8 Percentage of Gun-Related Deaths by Ethanol Level (N=696), 2021



Note: Of the 1,255 gun related fatalities, 44.5% (n=559) did not receive alcohol testing

Figure 6.9 Number of Gun-Related Deaths by Alcohol Level and Manner of Death (N=696), 2021



Note: Of the 1,195 gun related fatalities, 46.9% (n=560) did not receive alcohol testing

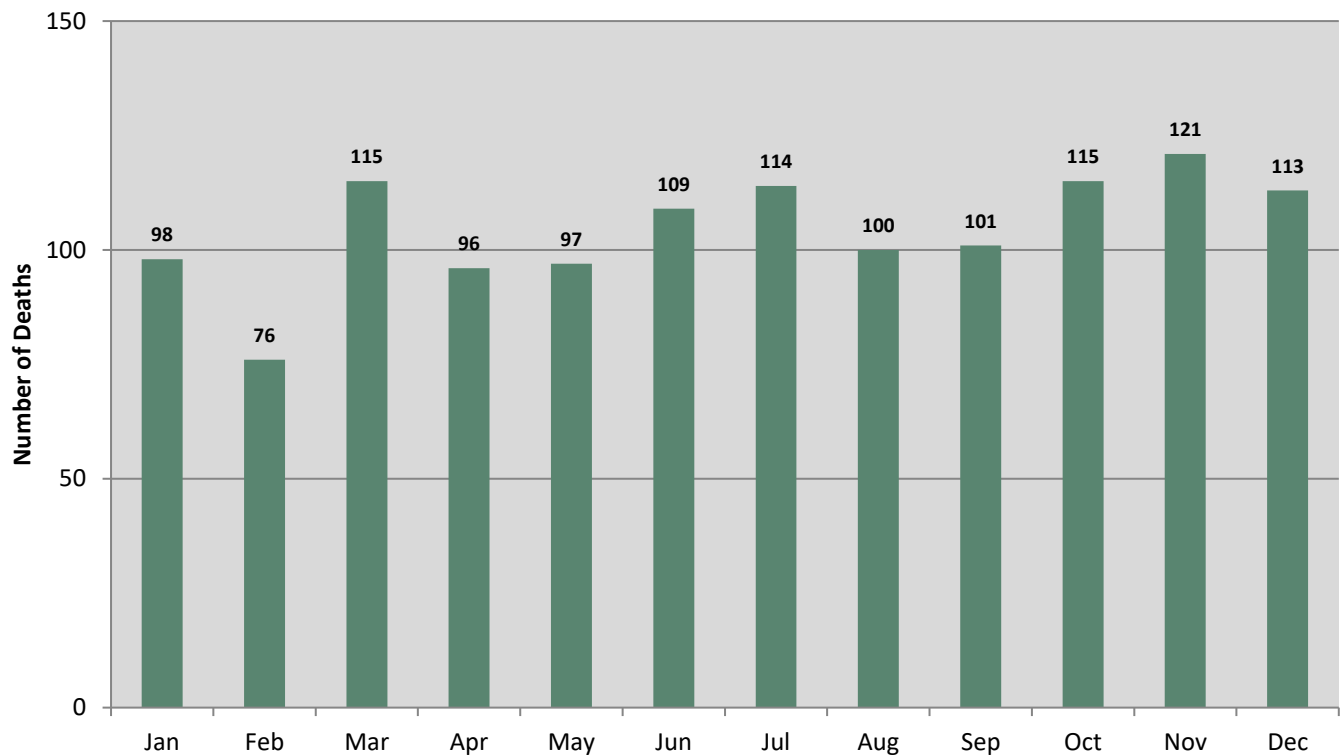
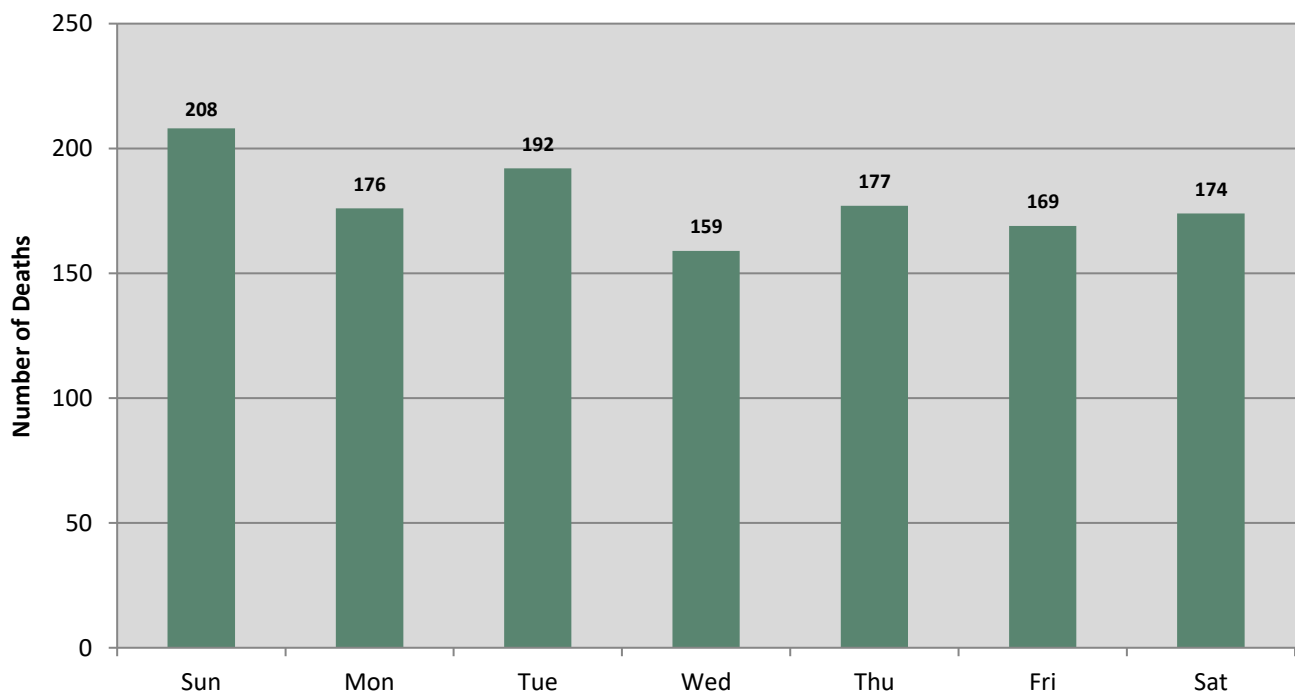
Figure 6.10 Number of Gun-Related Deaths by Month of Death, 2021**Figure 6.11 Number of Gun-Related Deaths by Day of Week, 2021**

Table 6.3 Number and Rate of Gun-Related Deaths by Locality of Residence, 2021

Locality of Residence	Deaths	Rate
Accomack County	15	46.5
Albemarle County	13	11.7
Alexandria City	5	3.2
Alleghany County	7	47.6
Amelia County	3	23.1
Amherst County	6	18.9
Appomattox County	2	12.5
Arlington County	5	2.1
Augusta County	16	20.9
Bath County	0	0.0
Bedford County	10	12.5
Bland County	0	0.0
Botetourt County	5	14.9
Bristol City	1	5.8
Brunswick County	3	18.7
Buchanan County	2	9.7
Buckingham County	6	34.9
Buena Vista City	0	0.0
Campbell County	8	14.5
Caroline County	6	19.4
Carroll County	8	26.6
Charles City County	1	14.7
Charlotte County	5	42.3
Charlottesville City	0	0.0
Chesapeake City	46	18.6
Chesterfield County	74	20.7
Clarke County	2	13.7
Colonial Heights City	1	5.8
Covington City	0	0.0
Craig County	2	39.4
Culpeper County	8	14.9
Cumberland County	2	20.1
Danville City	12	30.1
Dickenson County	4	28.4
Dinwiddie County	4	13.9
Emporia City	3	57.1
Essex County	3	27.4
Fairfax City	3	12.8
Fairfax County	48	4.2
Falls Church City	1	6.8
Fauquier County	8	11.2

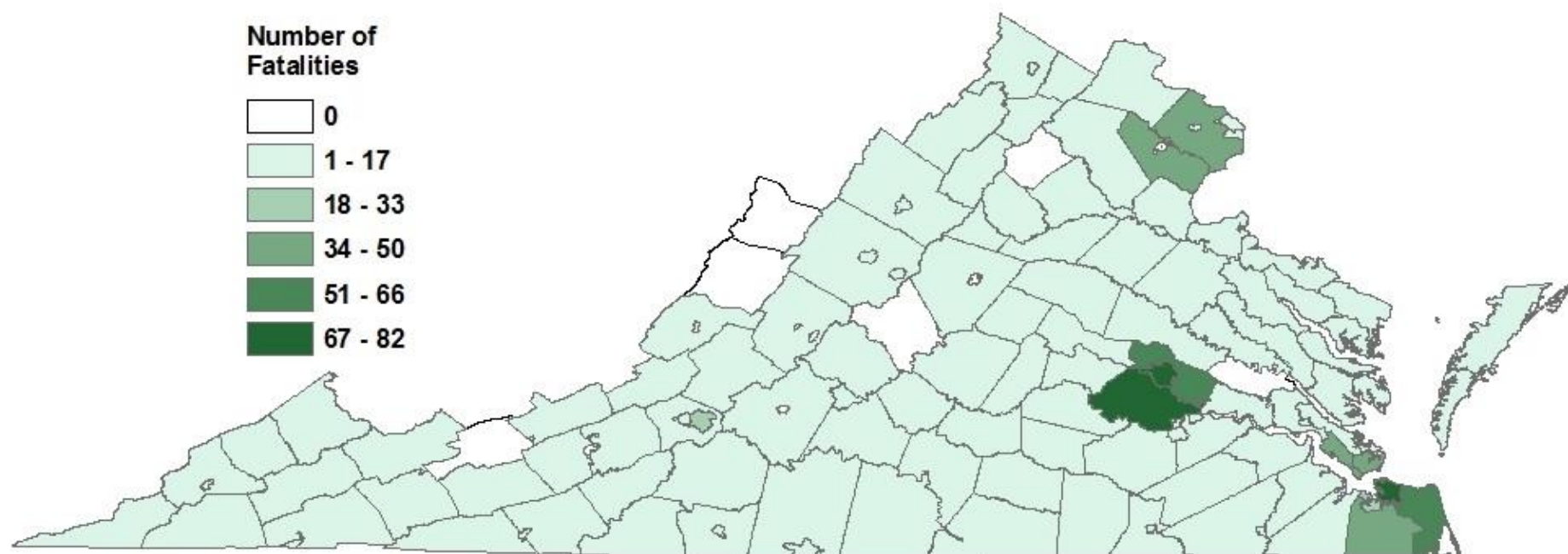
Locality of Residence	Deaths	Rate
Floyd County	1	6.3
Fluvanna County	1	3.6
Franklin City	2	25.5
Franklin County	4	7.1
Frederick County	7	7.7
Fredericksburg City	6	20.3
Galax City	2	31.8
Giles County	3	18.0
Gloucester County	2	5.3
Goochland County	8	32.7
Grayson County	2	12.9
Greene County	3	14.9
Greensville County	1	8.9
Halifax County	5	14.9
Hampton City	39	28.8
Hanover County	12	11.1
Harrisonburg City	2	3.8
Henrico County	54	16.2
Henry County	11	21.9
Highland County	0	0.0
Hopewell City	4	17.9
Isle of Wight County	10	26.5
James City County	10	12.9
King and Queen County	3	43.2
King George County	2	7.3
King William County	3	17.0
Lancaster County	1	9.4
Lee County	4	17.2
Lexington City	0	0.0
Loudoun County	11	2.6
Louisa County	1	2.6
Lunenburg County	4	32.6
Lynchburg City	12	14.7
Madison County	3	22.5
Manassas City	0	0.0
Manassas Park City	1	5.6
Martinsville City	4	32.4
Mathews County	2	22.8
Mecklenburg County	8	26.1
Middlesex County	4	37.8
Montgomery County	6	6.1

Locality of Residence	Deaths	Rate
Nelson County	0	0.0
New Kent County	0	0.0
Newport News City	41	22.9
Norfolk City	74	30.5
Northampton County	3	25.7
Northumberland County	2	16.6
Norton City	1	25.1
Nottoway County	1	6.6
Orange County	6	15.9
Page County	9	37.6
Patrick County	2	11.4
Petersburg City	17	55.8
Pittsylvania County	12	20.1
Poquoson City	2	16.3
Portsmouth City	32	33.7
Powhatan County	5	16.6
Prince Edward County	2	8.7
Prince George County	4	10.3
Prince William County	44	9.3
Pulaski County	8	23.6
Radford City	0	0.0
Rappahannock County	0	0.0
Richmond City	82	35.3
Richmond County	1	11.0
Roanoke City	28	28.3
Roanoke County	15	15.9
Rockbridge County	5	22.0
Rockingham County	11	13.4
Russell County	2	7.5
Salem City	5	19.7
Scott County	2	9.2
Shenandoah County	8	18.2
Smyth County	4	13.3
Southampton County	6	34.0
Spotsylvania County	11	7.9
Stafford County	15	9.6
Staunton City	1	4.0
Suffolk City	17	18.1
Surry County	1	15.7
Sussex County	1	9.2
Tazewell County	4	9.9
Virginia Beach City	58	12.9
Warren County	5	12.4

Locality of Residence	Deaths	Rate
Washington County	6	11.2
Waynesboro City	3	13.2
Westmoreland County	1	5.5
Williamsburg City	1	6.6
Winchester City	3	10.8
Wise County	6	16.1
Wythe County	5	17.5
York County	3	4.3
<i>Subtotal (in-state)</i>	1181	13.7
Out of State	71	ND
Unknown	3	ND
<i>Subtotal (out-of-state)</i>	74	ND
TOTAL	1255	14.6

Note: No denominator is represented by ND

Map 6.1 Number of Gun-Related Deaths by Locality of Residence, 2021



Map 6.2 Rates of Gun-Related Death by Locality of Residence, 2021

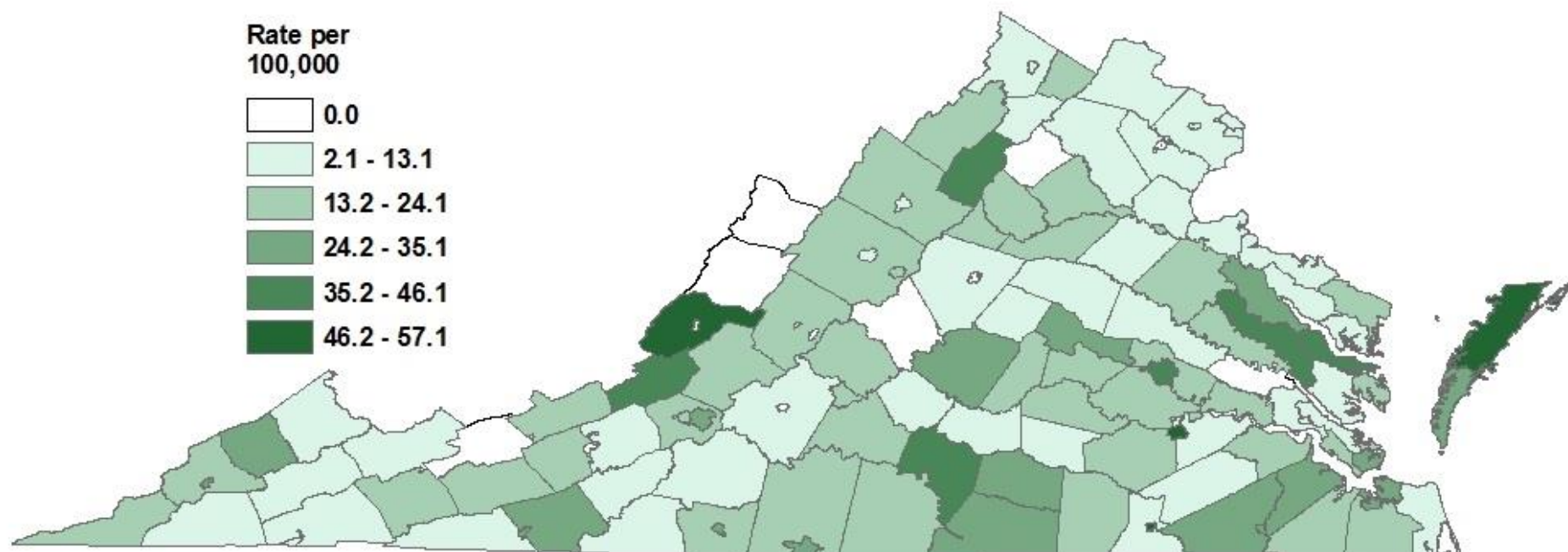


Table 6.4 Number and Rate of Gun-Related Deaths by Locality of Injury, 2021

Locality of Injury	Deaths	Rate
Accomack County	15	46.5
Albemarle County	11	9.9
Alexandria City	5	3.2
Alleghany County	6	40.8
Amelia County	3	23.1
Amherst County	6	18.9
Appomattox County	1	6.2
Arlington County	6	2.5
Augusta County	16	20.9
Bath County	0	0.0
Bedford County	16	20.0
Bland County	0	0.0
Botetourt County	4	11.9
Bristol City	2	11.5
Brunswick County	1	6.2
Buchanan County	2	9.7
Buckingham County	3	17.5
Buena Vista City	0	0.0
Campbell County	8	14.5
Caroline County	7	22.7
Carroll County	9	29.9
Charles City County	3	44.0
Charlotte County	4	33.8
Charlottesville City	2	4.3
Chesapeake City	44	17.8
Chesterfield County	54	15.1
Clarke County	2	13.7
Colonial Heights City	4	23.2
Covington City	0	0.0
Craig County	4	78.8
Culpeper County	7	13.1
Cumberland County	0	0.0
Danville City	11	27.6
Dickenson County	5	35.5
Dinwiddie County	4	13.9
Emporia City	2	38.0
Essex County	3	27.4
Fairfax City	1	4.3
Fairfax County	53	4.6
Falls Church City	0	0.0
Fauquier County	10	14.0
Floyd County	1	6.3
Fluvanna County	1	3.6

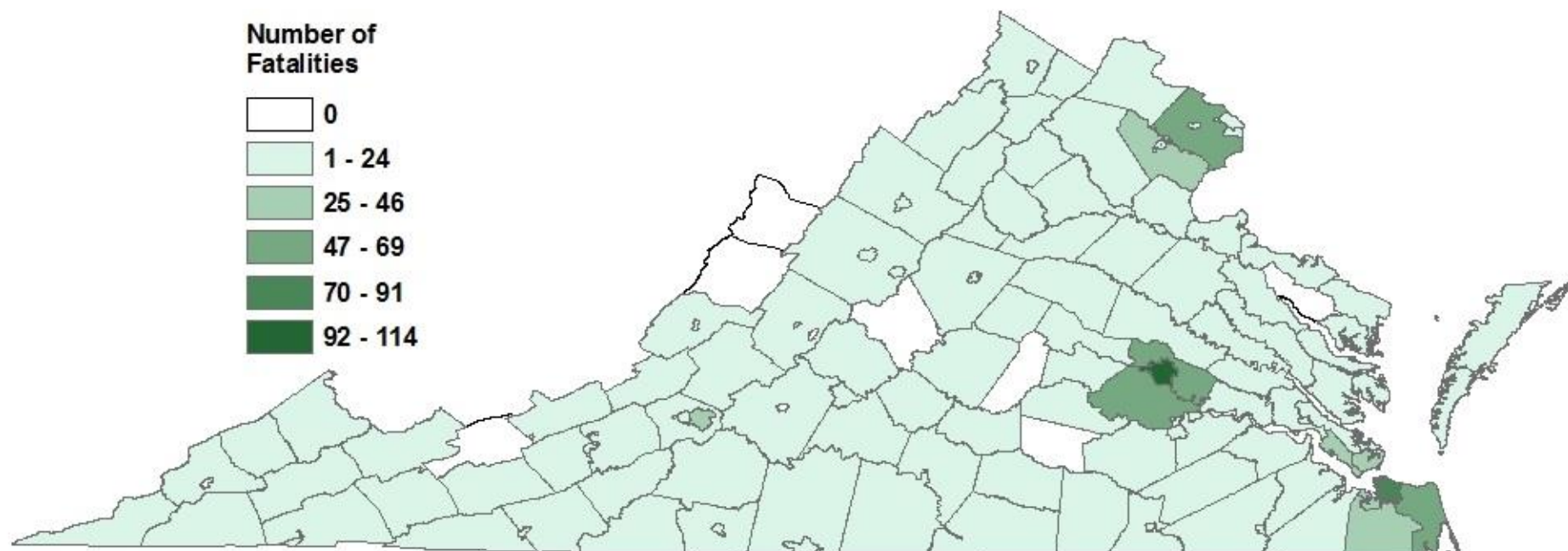
Locality of Injury	Deaths	Rate
Franklin City	3	38.3
Franklin County	6	10.7
Frederick County	6	6.6
Fredericksburg City	6	20.3
Galax City	2	31.8
Giles County	5	30.0
Gloucester County	3	8.0
Goochland County	10	40.9
Grayson County	3	19.4
Greene County	4	19.9
Greensville County	1	8.9
Halifax County	8	23.8
Hampton City	42	31.0
Hanover County	10	9.2
Harrisonburg City	4	7.5
Henrico County	51	15.3
Henry County	10	19.9
Highland County	0	0.0
Hopewell City	5	22.3
Isle of Wight County	9	23.9
James City County	8	10.3
King and Queen County	3	43.2
King George County	2	7.3
King William County	4	22.7
Lancaster County	1	9.4
Lee County	4	17.2
Lexington City	0	0.0
Loudoun County	15	3.5
Louisa County	1	2.6
Lunenburg County	4	32.6
Lynchburg City	12	14.7
Madison County	4	30.0
Manassas City	1	2.4
Manassas Park City	0	0.0
Martinsville City	5	40.5
Mathews County	2	22.8
Mecklenburg County	8	26.1
Middlesex County	3	28.4
Montgomery County	7	7.1
Nelson County	0	0.0
New Kent County	1	4.2
Newport News City	45	25.1
Norfolk City	91	37.5

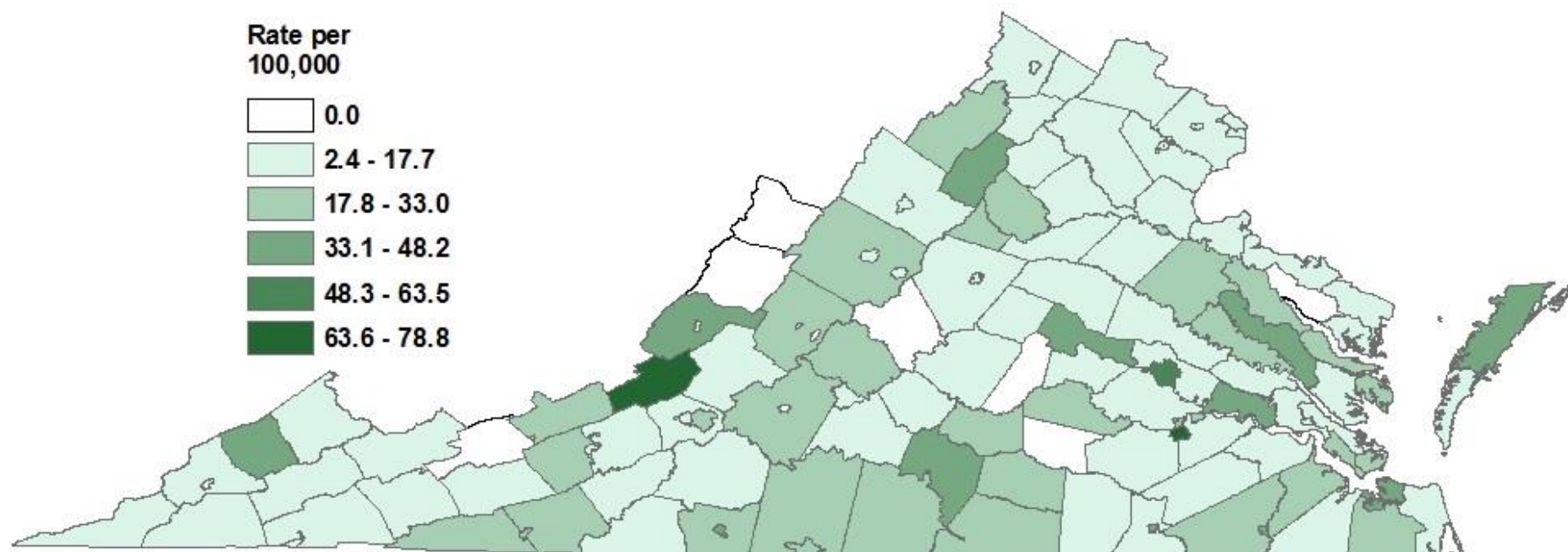
Locality of Injury	Deaths	Rate
Northampton County	2	17.1
Northumberland County	2	16.6
Norton City	0	0.0
Nottoway County	0	0.0
Orange County	4	10.6
Page County	9	37.6
Patrick County	1	5.7
Petersburg City	22	72.3
Pittsylvania County	15	25.1
Poquoson City	1	8.2
Portsmouth City	38	40.0
Powhatan County	5	16.6
Prince Edward County	6	26.1
Prince George County	5	12.9
Prince William County	41	8.6
Pulaski County	9	26.5
Radford City	1	5.5
Rappahannock County	1	13.8
Richmond City	114	49.1
Richmond County	0	0.0
Roanoke City	29	29.3
Roanoke County	14	14.8
Rockbridge County	5	22.0
Rockingham County	13	15.8
Russell County	3	11.3
Salem City	3	11.8
Scott County	3	13.9
Shenandoah County	8	18.2
Smyth County	4	13.3
Southampton County	5	28.4
Spotsylvania County	13	9.4
Stafford County	16	10.2
Staunton City	1	4.0
Suffolk City	15	16.0
Surry County	1	15.7
Sussex County	1	9.2
Tazewell County	6	14.8
Virginia Beach City	49	10.9
Warren County	6	14.8
Washington County	9	16.8
Waynesboro City	2	8.8
Westmoreland County	1	5.5
Williamsburg City	2	13.1

Locality of Injury	Deaths	Rate
Winchester City	4	14.4
Wise County	5	13.4
Wythe County	4	14.0
York County	4	5.8
<i>Subtotal (in-state)</i>	1247	14.5
Out of State	5	ND
Unknown	3	ND
<i>Subtotal (out-of-state)</i>	8	ND
TOTAL	1255	14.6

Note: No denominator is represented by ND

Map 6.3 Number of Gun-Related Deaths by Locality of Injury, 2021



Map 6.4 Rate of Gun-Related Deaths by Locality of Injury, 2021

SECTION 7: IN-CUSTODY (PRISONER) DEATHS (N=213)

Pursuant to § 32.1-283 of the Code of Virginia, the OCME investigates deaths of all persons in jail, prison, or other correctional institution, or in police custody. The OCME took jurisdiction of 213 in-custody deaths in 2021.

- The majority (66.2%) of in-custody deaths were natural deaths
- The majority of deaths were male (93.0%) and White (57.3%)

Figure 7.1 Number of In-Custody Deaths by Manner and Year of Death, 2007-2021

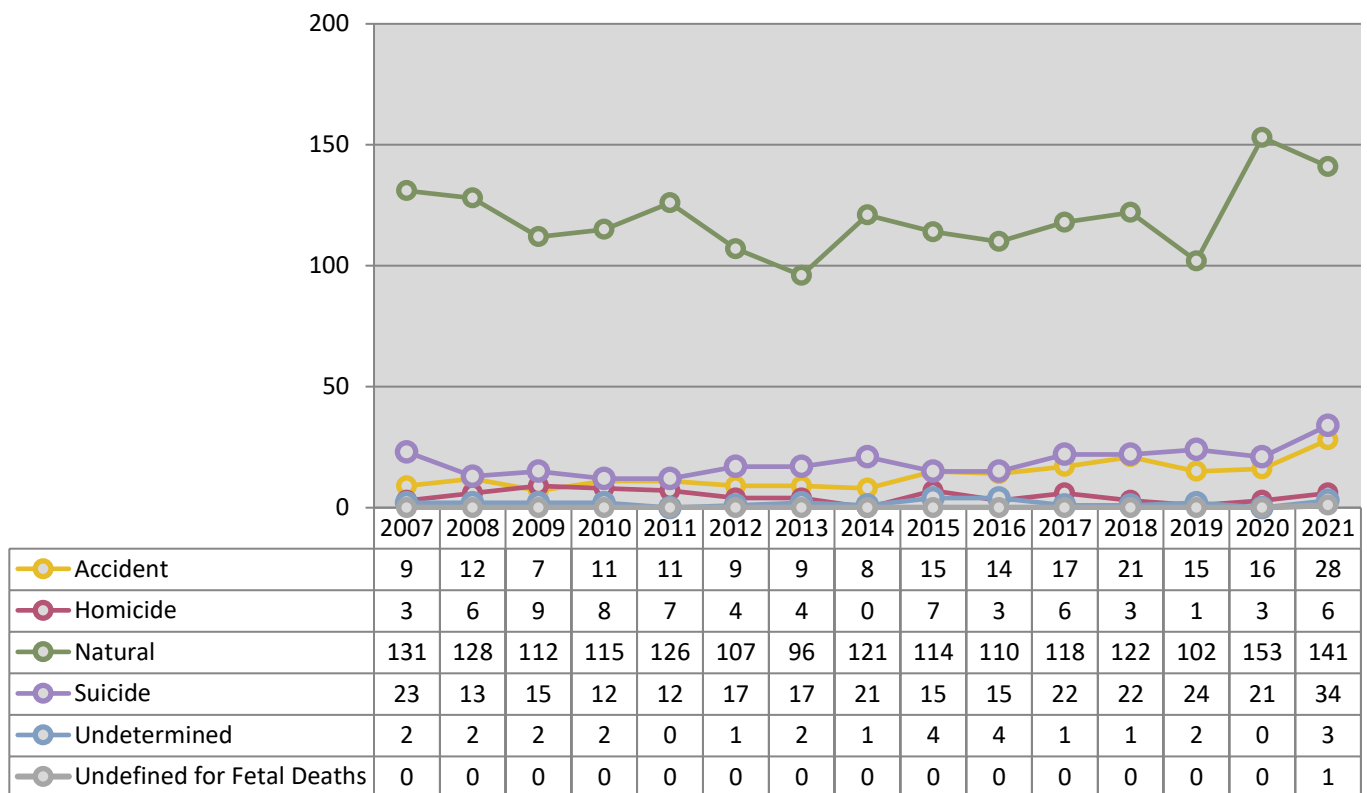


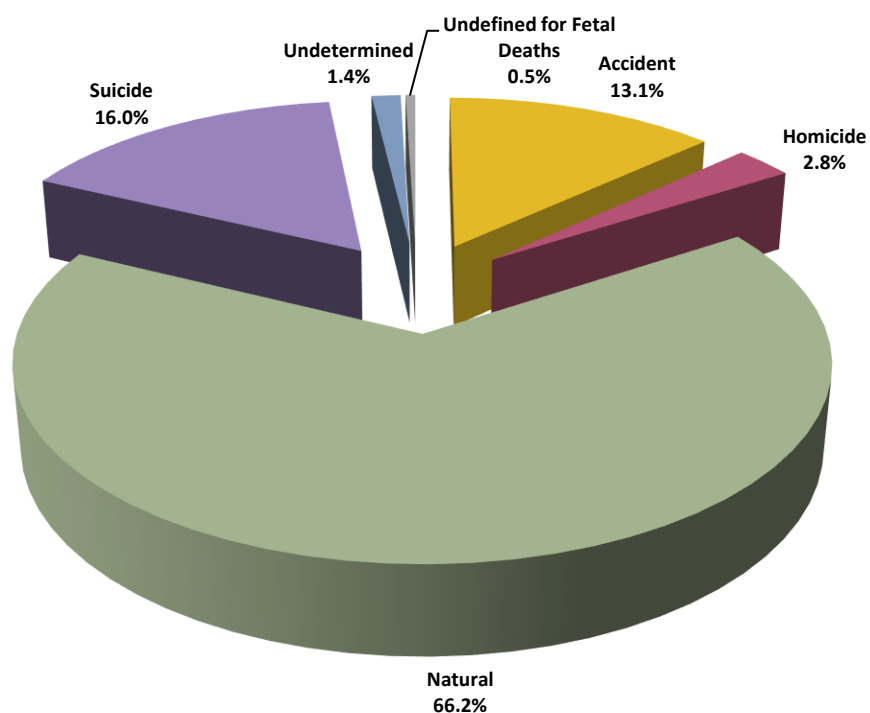
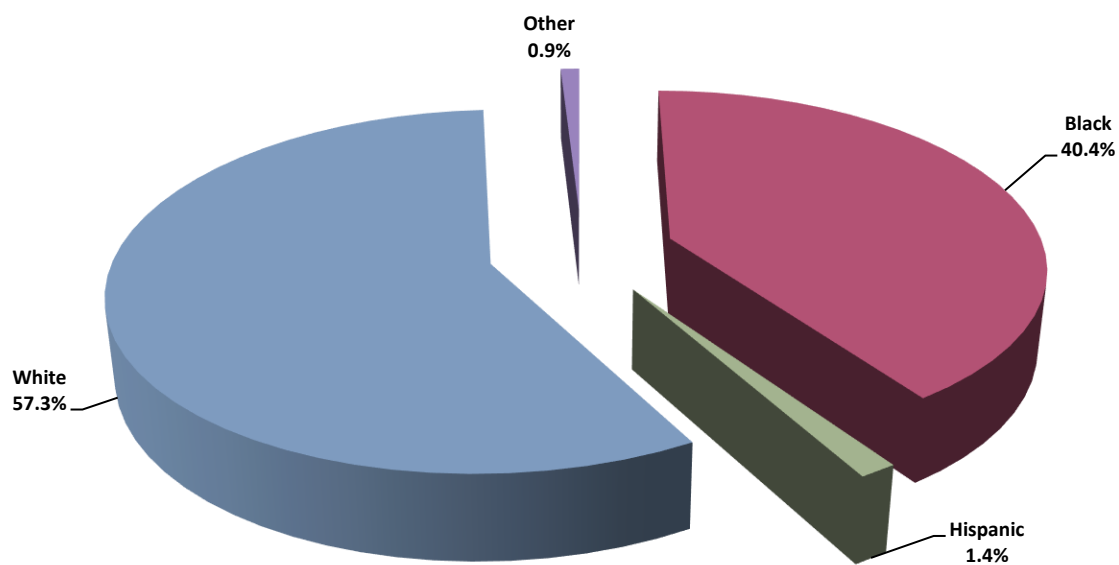
Figure 7.2 Percentage of In-Custody Deaths by Manner of Death, 2021**Figure 7.3 Percentage of In-Custody Deaths by Race/Ethnicity, 2021**

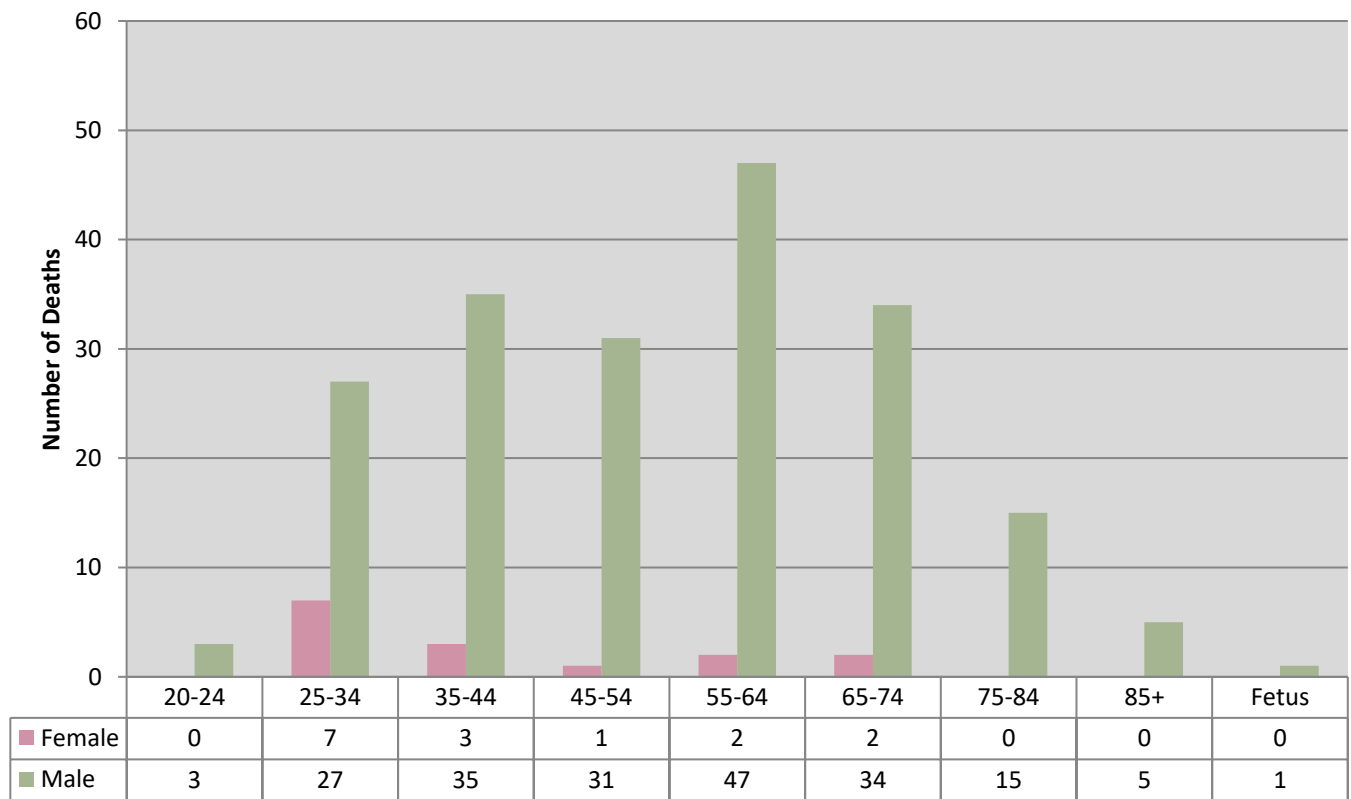
Figure 7.4 Number of In-Custody Deaths by Age Group and Gender, 2021

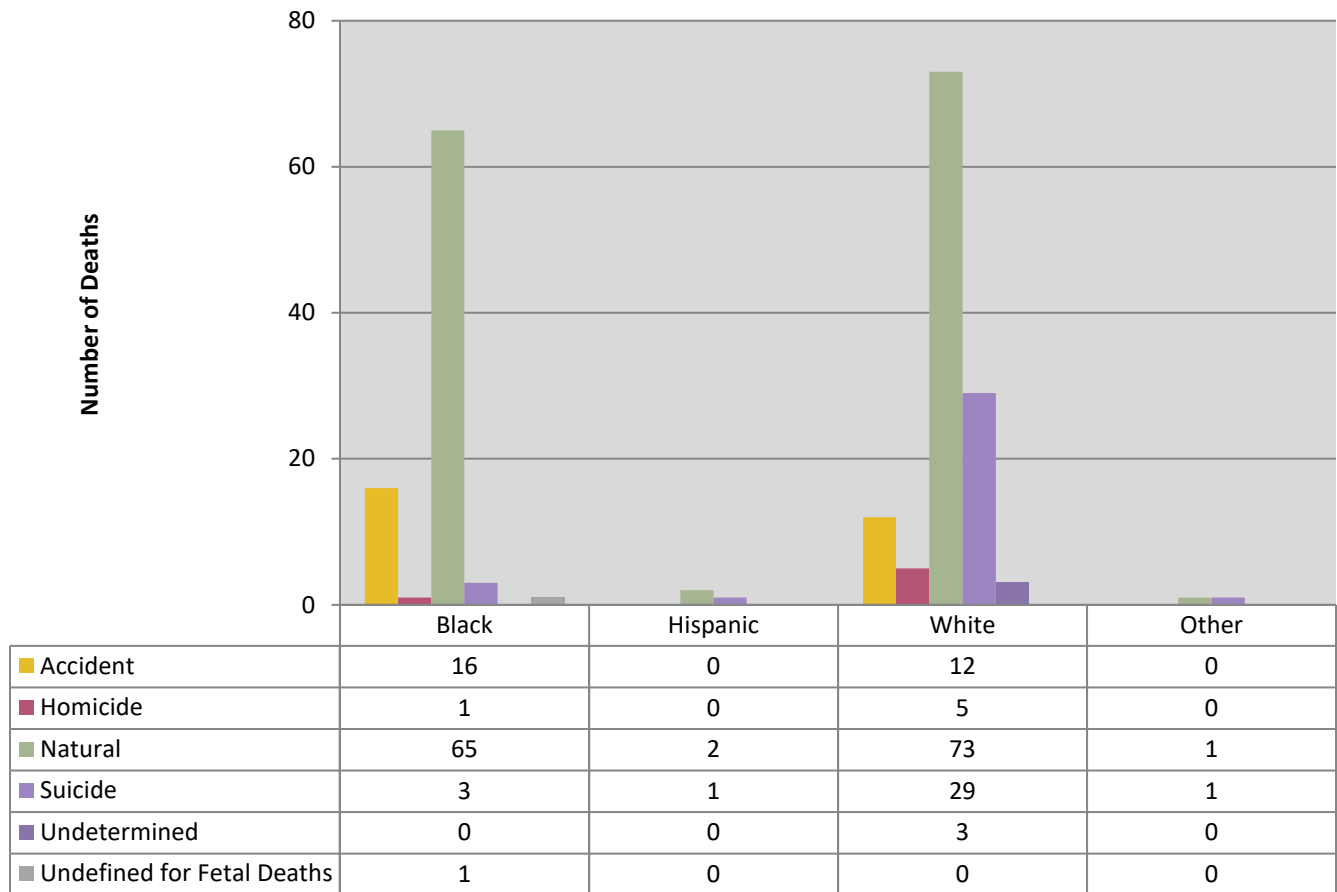
Figure 7.5 Number of In-Custody Deaths by Manner and Race/Ethnicity, 2021

Table 7.1 Number of In-Custody Deaths by Cause and Method of Death, 2021

NATURAL DEATHS	Autopsied	Total Cases
Cardiovascular Diseases/Disorders		
Acute coronary insufficiency	2	5
Atherosclerosis	11	17
Atherosclerosis and hypertension	13	17
Cardiac arrhythmia not specified	1	1
Cardiomyopathy	2	4
Hypertension	4	4
Valvular	1	1
Vascular dissection/rupture	3	5
Other cardiac disease/disorder	1	2
Central Nervous System Diseases/Disorders		
Degenerative disease	1	1
Seizure disorder	1	1
Vascular disease	1	8
Gastrointestinal Diseases/Disorders		
Cirrhosis	0	2
GI hemorrhage	2	3
GI Malignancy	6	10
Hepatitis	0	3
Other GI disease/disorder	0	1
Genitourinal Diseases/Disorders		
Genitourinal malignancy	1	2
Pulmonary Disease/Disorders		
COPD	3	7
Emboli	3	4
Pneumonia	2	14
Pulmonary malignancy	3	7
Other pulmonary disease/disorder	1	5
Systemic Diseases/Disorders		
Blood disorder	1	2
Chronic alcoholism	1	1
Chronic drug abuse	1	1
Diabetes	0	2
Other infectious disease	1	9
Sepsis	0	1
Other Natural Death/Disorder		
Other natural disease/disorder	2	2
Natural Death Subtotal	68	142
UNNATURAL DEATHS		
Asphyxia		
Hanged	28	28
Strangled/Neck compression	3	3

Other asphyxia	2	3
Drug Use		
Ingested and/or injected ethanol, illicit, prescription, and/or other type of drug	25	26
Gunshot Wound		
Handgun	1	1
Rifle	1	1
Shotgun	1	1
Traumatic Injury		
Beat by assailant(s)	1	1
Fall/jump from height	1	4
Fire/Thermal injuries	1	1
Other Unnatural		
Other unnatural	2	2
<i>Unnatural Death Subtotal</i>	66	71
TOTAL OCME DEATHS	134	213

SECTION 8: STATE MENTAL HEALTH DEATHS (N=52)

Pursuant to § 32.1-283 of the Code of Virginia, the OCME investigates the death of any patient or resident of a state mental health facility. The OCME took jurisdiction of 52 state mental health resident deaths in 2021.

- The majority of state mental health deaths were natural (90.4%), White (67.3%) and male (67.3%)

Figure 8.1 Percentage of State Mental Health Deaths by Manner, 2021

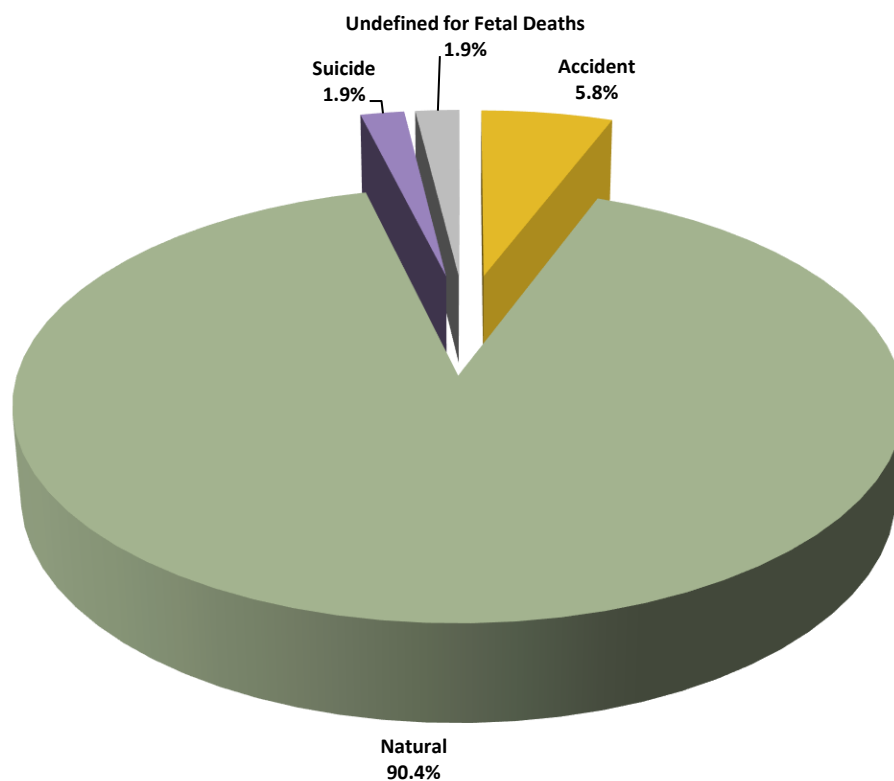


Figure 8.2 Percentage of State Mental Health Deaths by Race/Ethnicity, 2021

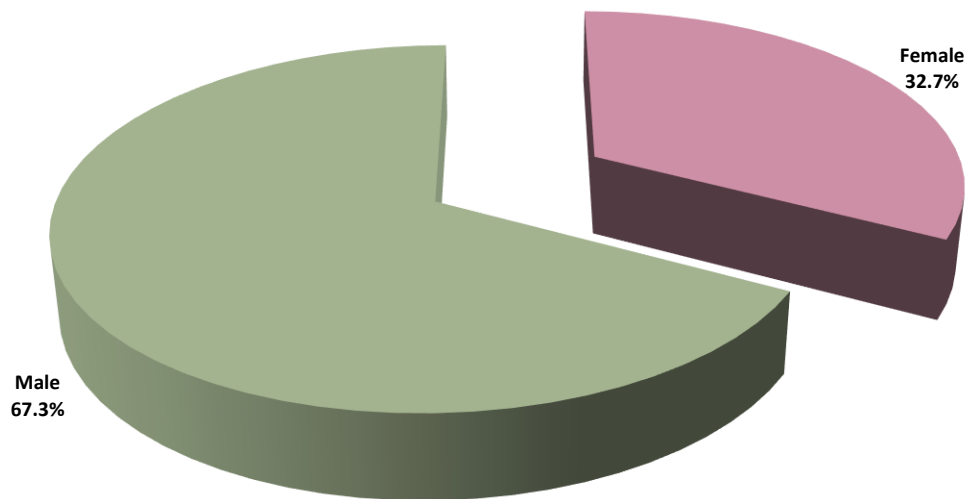


Figure 8.3 Number of State Mental Health Deaths by Age Group and Gender, 2021

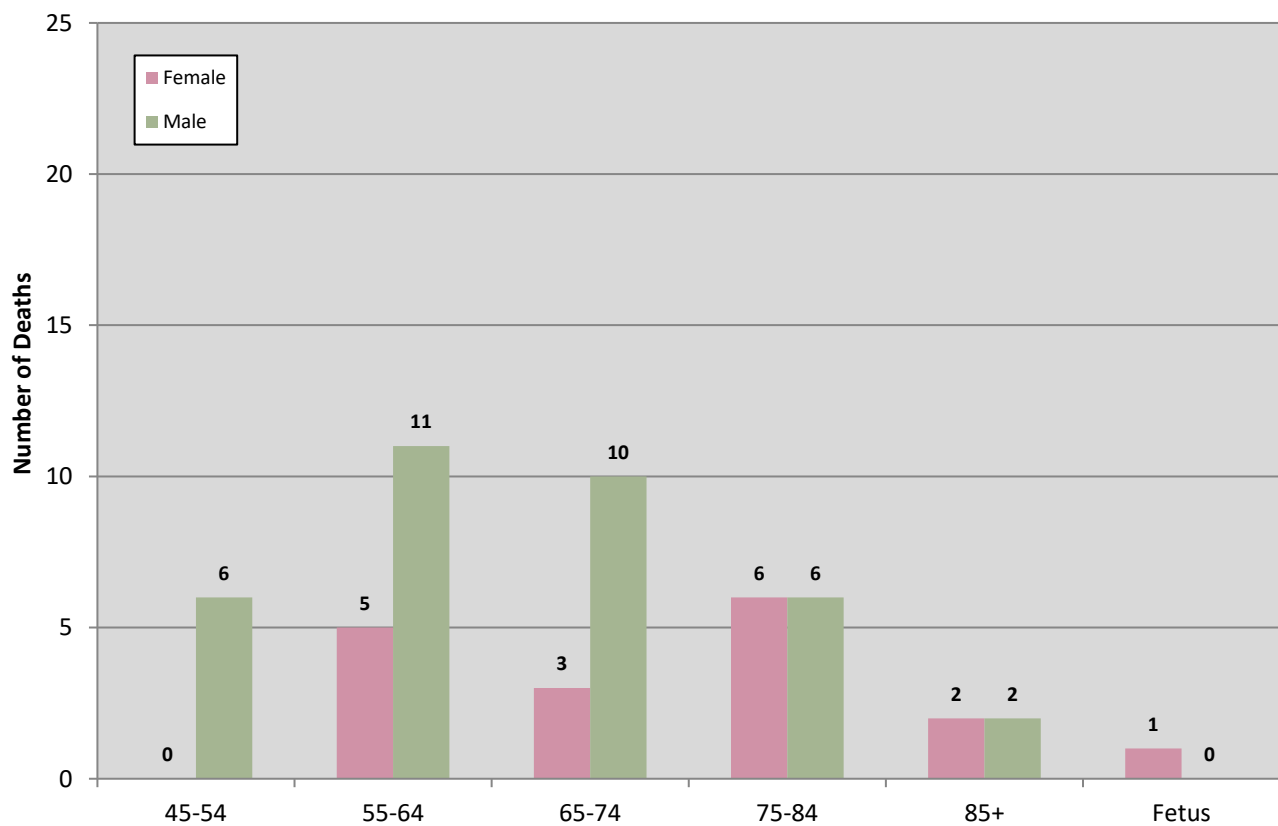


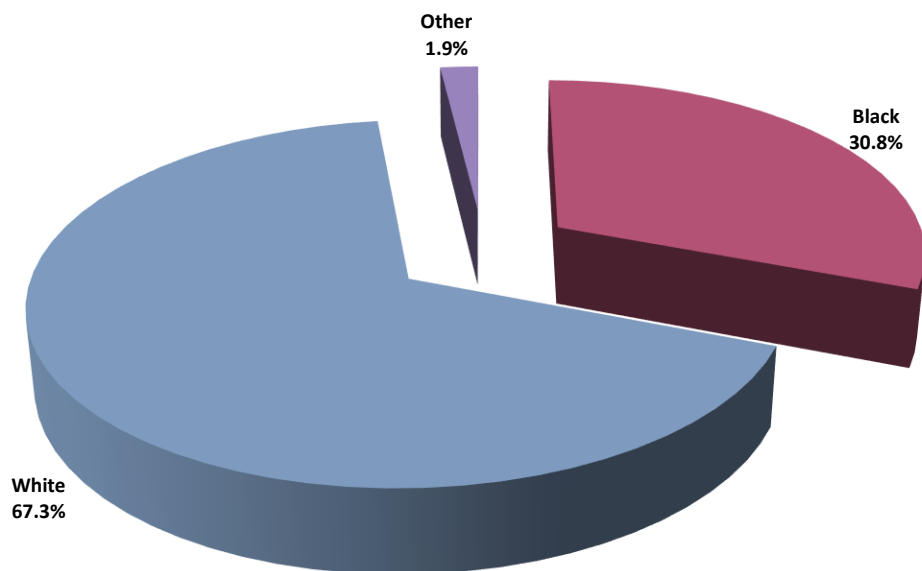
Figure 8.4 Percentage of State Mental Health Deaths Race/Ethnicity, 2021

Table 8.1 Number of State Mental Health Deaths by Cause and Method of Death, 2021

Natural Deaths	Autopsied	Total Cases
Cardiovascular Diseases/Disorders		
Acute coronary insufficiency	1	3
Atherosclerosis	1	1
Atherosclerosis and hypertension	5	5
Cardiomyopathy (not specified)	1	1
Hypertension	1	3
Other cardiac disease/disorder	1	1
Central Nervous System Diseases/Disorders		
CNS malignancy	0	1
Seizure disorder	2	2
Gastrointestinal Diseases/Disorders		
Cirrhosis	1	2
Genitourinal Diseases/Disorders		
Renal disease	0	1
Perinatal and Pediatric Diseases/Disorders		
Maternal Complications	0	1
Pulmonary Disease/Disorders		
Emboli	1	2
Pneumonia	1	12
Pulmonary malignancy	0	2
Systemic Disease/Disorders		
Blood disorder	0	1
Complications of dementia (Including Inanition)	1	1
Diabetes	0	1
Other infectious disease	0	3
Other systemic disease/disorder	2	2
Sepsis	0	1
Other Natural Death/Disorder		
Other malignancy	2	3
Natural Death Subtotal	20	49
Unnatural Deaths	Autopsied	Total Cases
Asphyxia		
Choking (food or foreign object)	0	1
Fall/Jump		
Fall/Jump from height	1	2
Unnatural Death Subtotal	1	3
TOTAL OCME DEATHS	21	52

SECTION 9: RETROSPECTIVE CASES (N=117)

Retrospective cases are deaths that are unreported to the OCME at the time of death, but are discovered upon later review and are therefore investigated by the OCME retrospectively. At times, medical care providers or death reporters misunderstand what type of case falls under the jurisdiction of the OCME and do not refer a case to the OCME. The OCME typically learns about these cases from the Virginia Department of Health's Division of Vital Records, funeral homes, or local medical examiners.

Some of these 117 retrospective deaths may have been deaths that occurred in prior years, but the OCME investigation began in 2021.

- The majority of the OCME's retrospective deaths were accidents (75.2%)
- Falls were the most common unreported type of death (49.6%), nearly all occurring among elder persons

Figure 9.1 Percentage of Retrospective Deaths by Manner of Death, 2021

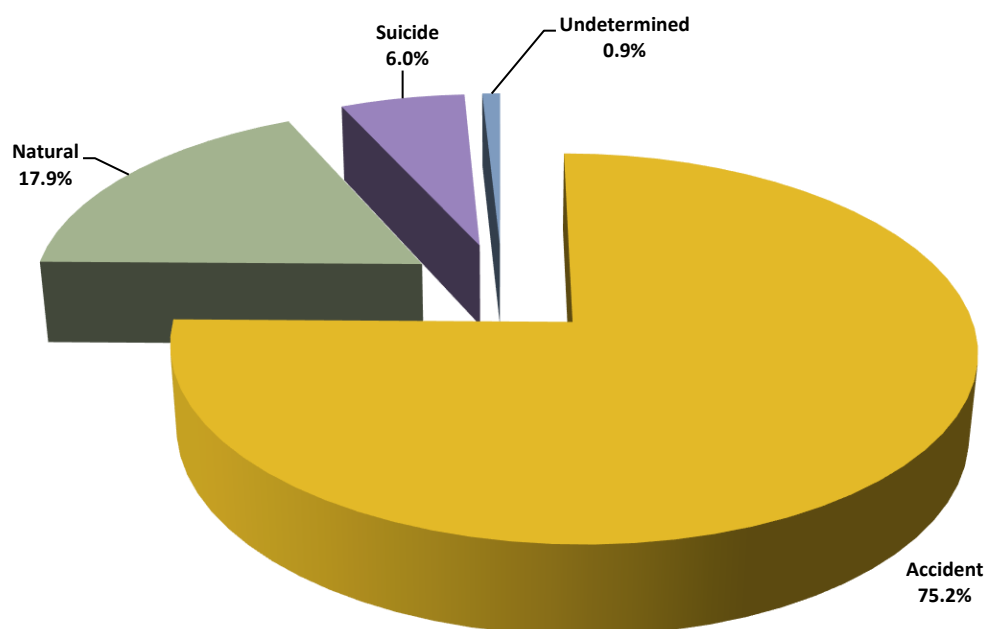


Table 9.1 Number and Percentage of Retrospective Deaths by OCME District, 2021

OCME District	Number	Percent
Central	19	16.2%
Northern	40	34.2%
Tidewater	24	20.5%
Western	34	29.1%
Total	117	100.0%

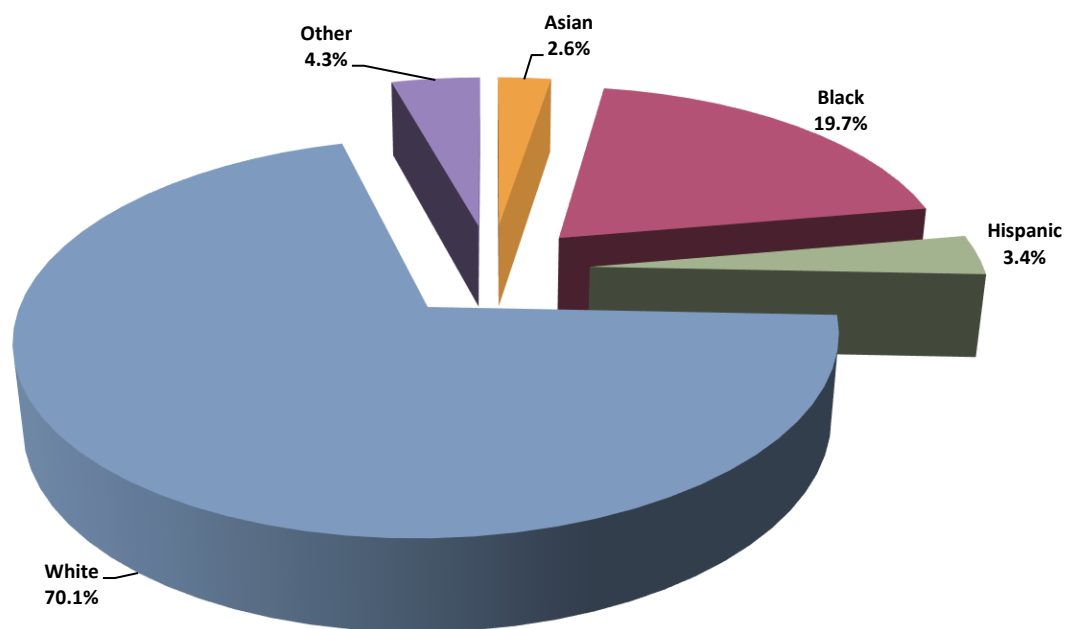
Figure 9.2 Percentage of Retrospective Deaths by Race/Ethnicity, 2021

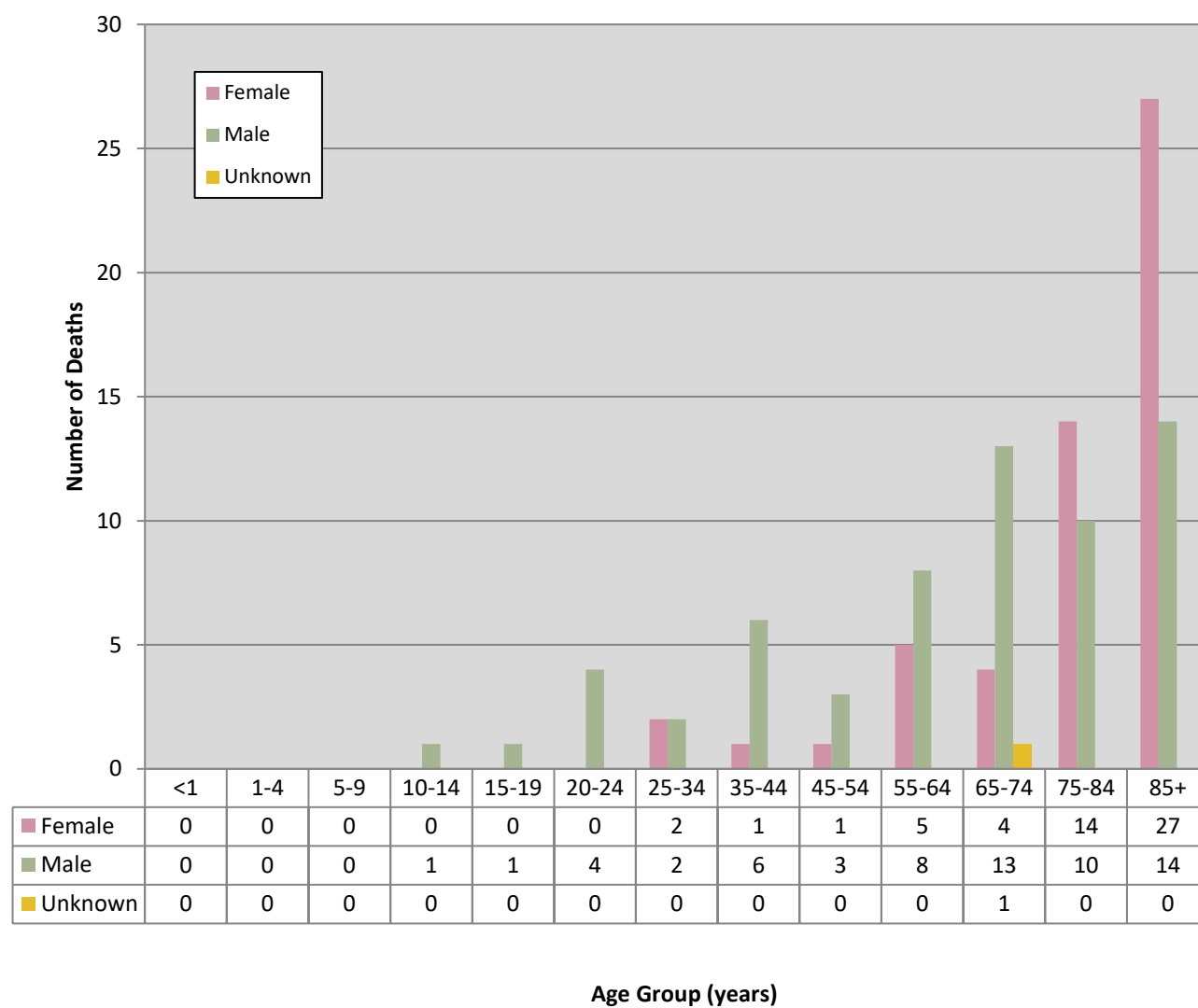
Figure 9.3 Number of Retrospective Deaths by Age Group and Gender, 2021

Table 9.2 Number of Retrospective Deaths by Cause and Method of Death, 2021

Natural Deaths	Total Cases
Cardiovascular Diseases/Disorders	
Acute coronary insufficiency	4
Atherosclerosis	4
Atherosclerosis and hypertension	3
Cardiomyopathy (not otherwise specified)	1
Hypertension	3
Central Nervous System Disease/Disorder	
Degenerative disease	1
Vascular disease	1
Other CNS disease/disorder	1
Genitourinal Diseases/Disorders	
Genitourinal malignancy	1
Pulmonary Diseases/Disorders	
Pneumonia	1
Systemic Disease/Disorder	
Chronic alcoholism	1
Chronic drug abuse	1
Complications of dementia (including inanition)	1
Diabetes	1
Other infectious disease	1
Natural Death Subtotal	25
Unnatural Deaths	Total Cases
Asphyxia	
Asphyxia with Plastic Bag	1
Choking (food or foreign object)	2
Drowning	1
Hanging	2
Drug Use	
Ingested and/or injected ethanol, illicit, prescription, and/or other type of drug	5
Fall/Jump	
Fall from standing	58
Gunshot	
Gunshot wound	
Handgun	3
Unknown	2
Motor Vehicle	
Motor vehicle collision	15
Traumatic Injury	

Blunt trauma from falling object	2
Other trauma	1
<i>Unnatural Death Subtotal</i>	92
TOTAL OCME DEATHS	117

Note: the OCME cannot perform an autopsy on retrospective cases because the remains have already been processed and the final disposition has already been completed

GLOSSARY

Accident – The *manner of death* used when there is no evidence of intent; an unintentional, sudden, and unexpected death.

Assistant Chief Medical Examiner – A forensic pathologist who has the duty of performing autopsies and investigating deaths that fall under the *jurisdiction* of the *Office of the Chief Medical Examiner*, and determining *cause* and *manner of death*.

Autopsy – A detailed postmortem external and internal examination of a body to determine cause and manner of death, collect evidence, and determine the presence or absence of injury.

Cause of Death – The disease, injury, or poison that results in a physiological derangement or biochemical disturbance that is incompatible with life. The result of post-mortem examination, including autopsy and toxicological findings, combined with information about the medical history of the decedent, serves to establish the *cause of death*.

Chief Medical Examiner – The head of the *Office of the Chief Medical Examiner*. The Chief Medical Examiner must be a forensic pathologist licensed to practice medicine in Virginia and may appoint *Assistant Chief Medical Examiners* who are forensic pathologists, and *Local Medical Examiners*.

Children – Individuals 17 years of age and younger.

Drug Caused Death – A death caused by a drug or combination of drugs.

Ethanol – An alcohol, which is the principal intoxicant in beer, liquor, and wine. A person with an alcohol concentration in blood of 0.08 percent by weight by volume (0.08%) is legally intoxicated in Virginia.

Ethanol Present – Deaths in which toxicological tests reveal a reportable level of *ethanol* (0.01% BAC or greater) at the time of death.

Homicide – The *manner of death* in which death results from the intentional harm of one person by another.

Jurisdiction – Pursuant to the Code of Virginia § 32.1-283, the code details the extent of the Office of the Chief Medical Examiner's authority over deaths:

'Upon the death of any person from trauma, injury, violence, poisoning, accident, suicide or homicide, or suddenly when in apparent good health, or when unattended by a physician, or in jail, prison, other correctional institution or in police custody, or who is an individual receiving services in a state hospital or training center operated by the Department of Behavioral Health and Developmental Services, or suddenly as an apparent result of fire, or in any suspicious, unusual or unnatural manner, or the sudden death of any infant less than 18 months of age whose death is suspected to be attributable to Sudden

Infant Death Syndrome (SIDS), the medical examiner of the county or city in which death occurs shall be notified by the physician in attendance, hospital, law-enforcement officer, funeral director or any other person having knowledge of such death.'

Local Medical Examiner – A physician, nurse practitioner, or physician assistant appointed by the *Chief Medical Examiner* for a city or county to assist in the investigation of deaths and determine *jurisdiction* and disposition of cases reported; additionally, to perform external examinations when required. There is a local medical examiner in most counties in Virginia.

Locality of Death – The county/city where the death occurred. The county/city where the decedent legally resided, the county/city where the decedent was fatally injured, and the county/city where the decedent died may be the same or different.

Locality of Event – The county/city where a person sustained the injury result eventually resulting in death.

Locality of Residence – The county/city where a person legally resides. If not a resident of Virginia, the decedent is listed as “out of state”.

Manner of Death – The general category of the circumstances of the event which causes the death. The categories are *accident, homicide, natural, suicide, and undetermined*.

Method of Death – The means, fatal agency or item causing death, present at the time of injury or death.

Motor Vehicle Collision Related Death – A death involving a motor vehicle. Motor vehicles include automobiles, vans, motorcycles, trucks, aircraft, and trains. The decedent is usually a driver of, a passenger in, or a pedestrian who is struck by a motor vehicle. The death of a bicyclist that is struck by a motor vehicle is considered to be a motor vehicle related death.

Natural – The *manner of death* used when a disease alone causes death. If death is hastened by an injury, the *manner of death* is not considered natural.

Office of the Chief Medical Examiner – The Office of the Chief Medical Examiner (OCME) lies within the Virginia Department of Health and is responsible for the investigation of sudden, violent, or unexpected death.

Opiate – A class of drugs derived from the opium poppy plant (*Papaver somniferum*). “Opioid” is often used interchangeably with opiates, and describes chemical/pharmaceutical narcotics that bind to the opiate receptors of the brain and work very similarly to opiates.

Stimulant – A class of drugs, including cocaine and oral amphetamines, whose principal action is the stimulation of the central nervous system.

Sudden and Unexpected Infant Death – A diagnosis designated for infants (children under the age of 1 year). Sudden and Unexpected Infant Death (SUID) is a diagnosis made in cases in which autopsy does not reveal a definitive medical or traumatic cause of death and the circumstances surrounding the death suggest that there is an associated risk factor for dying, such as unsafe bedding or co-sleep, or some other external factor, but the contribution of this factor cannot be determined with certainty. The diagnosis may also be used in the situation where a medical disease is identified, but it is uncertain that this disease caused death.

Sudden Infant Death Syndrome –Sudden Infant Death Syndrome (SIDS) is defined as the sudden death of an infant that cannot be explained after a thorough investigation is conducted, including a complete autopsy, examination of the death scene which includes no external risk factors, and review of the clinical history.

Suicide – The *manner of death* in which death results from the purposeful attempt to end one's life.

Undetermined – The *manner of death* for deaths in which there is insufficient information to assign another manner. An undetermined death may have an undetermined cause of death and an unknown manner, an undetermined cause of death and a known manner, or a determined cause of death and an unknown manner.

View- A detailed postmortem external examination of the decedent's body, clothing, and injuries that may have caused or contributed to their death.

MEDICAL EXAMINER DISTRICTS

CENTRAL *Counties* of Albemarle, Amelia, Appomattox, Brunswick, Buckingham, Caroline, Charles City, Charlotte, Chesterfield, Cumberland, Dinwiddie, Essex, Fluvanna, Goochland, Greene, Greenville, Halifax, Hanover, Henrico, King and Queen, King George, King William, Lancaster, Louisa, Lunenburg, Mecklenburg, Middlesex, Nelson, New Kent, Northumberland, Nottoway, Powhatan, Prince Edward, Prince George, Richmond, Spotsylvania, Surry, Sussex, and Westmoreland. *Cities* of Charlottesville, Colonial Heights, Emporia, Fredericksburg, Hopewell, Petersburg, and Richmond.

NORTHERN *Counties* of Arlington, Augusta, Clarke, Culpeper, Fairfax, Fauquier, Frederick, Loudoun, Madison, Orange, Page, Prince William, Rappahannock, Rockingham, Shenandoah, Stafford, and Warren. *Cities* of Alexandria, Fairfax, Falls Church, Harrisonburg, Manassas, Manassas Park, Staunton, Waynesboro, and Winchester.




TIDEWATER *Counties* of Accomack, Gloucester, Isle of Wight, James City, Mathews, Northampton, Southampton, and York. *Cities* of Chesapeake, Franklin, Hampton, Newport News, Norfolk, Poquoson, Portsmouth, Suffolk, Virginia Beach, and Williamsburg.

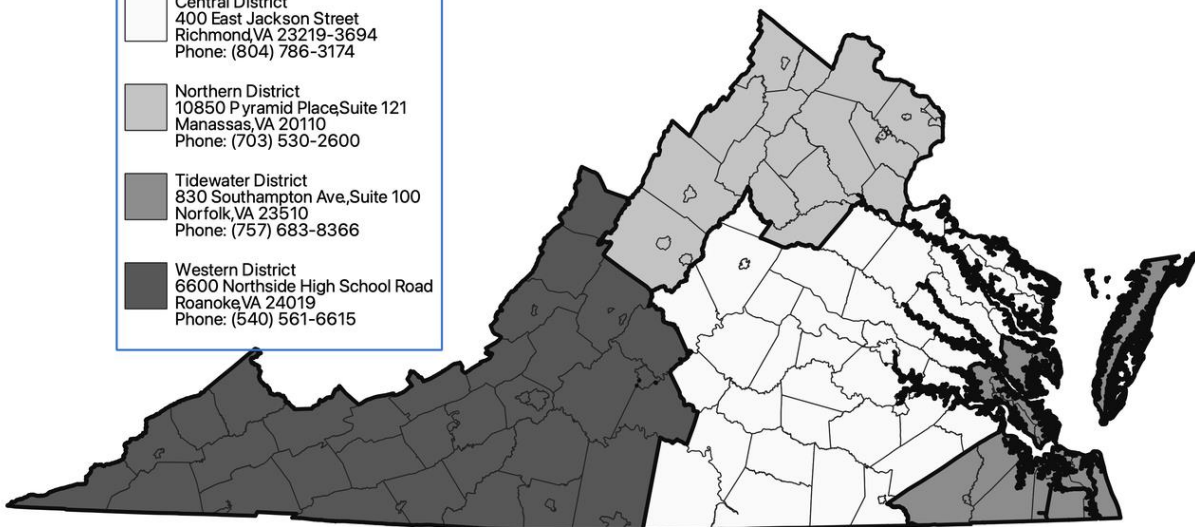
WESTERN *Counties* of Alleghany, Amherst, Bath, Bedford, Bland, Botetourt, Buchanan, Campbell, Carroll, Craig, Dickenson, Floyd, Franklin, Giles, Grayson, Henry, Highland, Lee, Montgomery, Patrick, Pittsylvania, Pulaski, Roanoke, Rockbridge, Russell, Scott, Smyth, Tazewell, Washington, Wise, and Wythe. *Cities* of Bristol, Buena Vista, Covington, Danville, Galax, Lexington, Lynchburg, Martinsville, Norton, Radford, Roanoke, and Salem.



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OCME Annual Reports from 2004 to 2021 are available online at:

<http://www.vdh.virginia.gov/medical-examiner/annual-reports/>

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